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CITY OF DURBAN

Annual Report

OF

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDING 31st DECEMBER, 1961

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ANNUAL REPORT 1961

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City Health Department,
640 Smith Street,
DURBAN.

24th October, 1962.

His Worship the Mayor, and Councillors
of the City of Durban,

Mr. Mayor, Ladies and Gentlemen,

I have the honour to present the fifty-ninth Annual Report on the health and sanitary circumstances of the City, together with a review of the work carried out by the City Health Department during the year ended 31st December, 1961.

No major outbreaks of infectious disease occurred. This in itself is satisfactory, but even more encouraging has been the improvement along a broad front in the City's health, brought about by a number of factors described fully in the Report.

Population

The census of 1960 established that Durban is now undisputedly the second largest city in the Republic.

Staff Augmentation

During the year the City Council agreed to amend the establishment of the Department by the addition of 76 new posts (25 European, 1 Coloured, 24 Bantu, 26 Asiatic). This has enabled me not only to keep pace with the population growth of the City, but to implement long overdue programmes. The results have more than justified the Council's enlightened outlook.

Infant Mortality

The infant mortality rate for Bantu has dropped dramatically from 242.42 to 167.10. This figure is subject to the same reservations in regard to accuracy as in previous years, but it does indicate a trend, and I have no doubt that this trend will be continued in subsequent years. The main factors contributing to this improvement have been:

(a) more child clinics;
(b) subsidised feeding of infants;
(c) increased clinic attendances;
(d) housing progress.

Infectious Diseases

The number of cases of typhoid fever dropped from 90 to 59 and poliomyelitis from 47 to 29, The primary factor in this improvement has been the tremendous progress made in re-housing the Bantu population under conditions of adequate hygiene and sanitation.

Rabies

During the year the City was threatened by an outbreak of rabies sweeping down from Zululand and Northern Natal. Prompt action through widespread publicity and by the immunisation of dogs in which Departmental staff played a large part, halted the outbreak at Durban's periphery. Although 7 human deaths and over 100 animal cases had been reported in Natal by the end of the year, only one suspect human case and one canine case were recorded in Durban.

Tuberculosis

An important step forward was taken during the year. The Department received approval for, and established tuberculosis clinics at kwaMashu and Cato Manor. To this end the staff was augmented by the addition of a medical officer (tuberculosis) and clinic nurses and assistants. A mobile X-Ray unit, designed departmentally, was delivered in June, 1961. The acquisition of this weapon, and the advanced striking bases at kwaMashu and Cato Manor, will enable us to launch out into full scale campaigns in these areas, against a disease whose invasive threat has not yet been halted, let alone rolled back.

Mosquito Control

A brief description of preliminary work on mosquito control by biological methods is included in this report (Chapter IX). So successful has been this venture that the cost of mosquito control to the City Council in 1961 was a fraction of that in previous years. The only remaining sources of major mosquito nuisance in the City are those on State owned property, outside the control of this Department.

Milk Control

During the year the only remaining producer of raw milk to the City elected to supply milk for pasteurisation. The whole of Durban's raw milk supply for consumption within the City is now heat-treated (pasteurised or sterilised), and Durban has become the first large centre in the Republic to achieve this public health goal.

Subsidised Feeding

During the year Durban was selected, together with Cape Town and Pretoria, to take part in a Government pilot scheme for the distribution of skimmed milk powder to infants. The object of the pilot scheme was to confirm the value of such feeding in preventing malnutrition, and to establish the capacity of local authorities to administer the scheme.

By the end of the year the scheme was in full trial and giving every indication of being a complete success.

Immunisation

During the year Durban took part in the national campaign for poliomyelitis vaccination using tri-valent oral vaccine. The campaign was planned in three phases, each lasting a fortnight at intervals of six weeks. The conduct of the campaigns posed considerable problems of organisation in a large multi-racial community such as ours, but the response by the staff, and by the three voluntary organisations (South African Red Cross Society, St. John Ambulance Association and Die Noodhulpliga) was magnificent. During the three phases, 618,277 doses of vaccine were administered to susceptible persons of all races.

Although the campaigns took place too near the end of the year to assess results, it is perhaps significant that no case of poliomyelitis was reported in Durban during the last three months of 1961.

Housing

A factor of tremendous public health significance during the year was the great progress made in the demolition of the Cato Manor shack complex, and the re-housing of the inhabitants in the new kwaMashu housing scheme. Originally comprising 4,427 shacks in extremely unhygienic surroundings, the Emergency Camp had been reduced by the Corporation Bantu Administration Department to 2,575 shacks by 31st December, 1961. The population of Cato Manor is estimated to have been reduced by 35,000 persons, and by the end of the year this massive slum clearance was evincing an improvement in community health. The incidence of typhoid fever and gastroenteritis had shown a marked decline in the City. The advantage of solid, adequate housing, individual water supply and individual water-borne sanitation had been amply demonstrated.

Sewerage

By the end of the year certain minor progress had been made in the overall sewerage development plans for the City. But the solution of Durban's sewerage problems remains the first priority in environmental health.

Air Pollution

The results of the Cleaner Air Campaign started in 1956, are slowly making themselves evident (Chapter (XI).

Transportation of Meat

In one respect the Department failed to achieve its objective, namely in bringing about a more satisfactory method of meat transportation. However, I believe that progress will come inevitably in this field.

Conclusion

I wish to express my thanks to the Mayor and the City Councillors for their continued interest and support in all health matters, in particular the Chairman and members of the Public Health Committee. I would also extend my gratitude to the Town Clerk and Heads of Departments for their valued co-operation.

No progress in public health is possible without the enthusiasm and effort of the personnel engaged in its promotion and in this respect I would pay tribute to the team-spirit and loyal support of every member of the Durban City Health Department.

I have the honour to be,
Ladies and Gentlemen,
Your obedient servant,

A. STEPHEN
M.B.E., BSc., M.B., Ch.B., D.P.H.
CITY MEDICAL OFFICER OF HEALTH

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REPORT ‘A’

I NATURAL CONDITIONS

Area

Prior to the incorporation of the Greenwood Park, Mayville, Sydenham, Umhlatuzana and South Coast Health Board areas in 1932, the extent of the Durban municipal area was 13 square miles (8,320 acres). The addition of these areas increased Durban's geographical size to 65 square miles (41,600 acres).

The influx of the Bantu to the City as a result of great industrial expansion in the post-war period, and the rapid natural increase in the Asiatics, resulted in an acute shortage of suitable accommodation for these groups. The recognation of utilitarian housing for the non-European community and slum clearance, saw firstly the incorporation of kwaMashu in 1958 as a major Bantu residential township. Subsequently in October of this year (1961) 6,900 acres at Chatsworth, lying to the south-west of the City, were included in the City boundaries to provide partially at any rate, for the Indian community's desperate housing problem.

The total area now administered by the Durban local authority is 85.82 square miles (54,929 acres).

Valuation (1960 figures in parenthesis)

Value of Land	R175,511,200	(R173,587,300)
Value of Buildings	R285,140,580	(R276,796,400)
Total	R460,651,780	(R450,383,700)
Rateable Value of Land	R145,807,120	(R144,125,120)
Rateable Value of Buildings	R248,584,860	(R241,806,040)
Total	R394,391,980	(R385,931,160)

Rates (inclusive of Water Rate)

Land:	2.92 cents in the rand on Rateable Valuation.
Buildings:	1.46 cents in the rand on Rateable Valuation.
Agricultural Land:	10 cents per acre per annum. Agricultural land in the City comprises 1,642 acres as compared with 2,359 acres in 1960.
kwaMashu (Bantu Township):	no rateable value or rates are applicable.

Chatsworth Indian Township:

Value of Land	R2,954,020
Value of Buildings	1,229,740
Total	R4,183,760
Rateable Value of Land	R2,216,260
Rateable Value of Buildings	R1,075,680
Total	R3,291,940

Rates:

Land:	1 1/16 cents in the rand on Rateable Valuation
Buildings:	7/16 cents in the rand on Rateable Valuation
Agricultural Rate:	60% of General Rate.

Geographical Data and Climate:

Situated on the East Coast of Africa at 31° East longitude and 29°, 52 minutes 30 seconds South latitude, Durban enjoys a sub-tropical climate and is served by the principal harbour of the Republic. By virtue of its advantages as regards siting, labour resources and port facilities, extensive industrial development in and contiguous to the City has taken place over the past 25 years. Average Annual rainfall: (1951–1960): 9670 points (38.68 inches).

METEOROLOGICAL DATA (By Courtesy of the Weather Office: Louis Botha Airport)

1961	24 Hour Shade Temperature (°C)			Relative Humidity		Barometer Readings (Inches)			Rainfall			Sunlight	
Month	Max.	Min.	Mean	Min.	Average	Max.	Min.	Mean	Points (0.1 mm)	Inches	No. of Days on which rain fell	Highest Fall	Average Hours of Sunshine per day
January	28.9	20.5	24.6	41	80	30.39	29.41	29.89	1,229	4.92	12	402	7.63
February	28.8	20.6	24.6	52	81	30.16	29.62	29.94	699	2.80	10	280	7.53
March	28.3	20.7	24.2	50	81	30.35	29.70	29.99	1,277	5.11	9	400	6.27
April	26.4	17.7	21.8	36	82	30.26	29.70	30.01	2,748	10.99	13	820	6.60
May	24.3	13.7	18.9	37	77	30.30	29.68	30.02	688	2.75	5	593	6.91
June	23.6	12.7	17.8	24	79	30.48	29.68	30.17	1,391	5.56	7	1,087	7.00
July	23.1	11.3	17.0	25	78	30.49	29.88	30.25	499	2.00	6	251	7.57
August	22.8	10.7	16.9	29	74	30.62	29.68	30.24	358	1.43	6	165	8.53
September	23.6	14.6	19.1	20	78	30.49	29.62	30.08	726	2.90	11	186	6.31
October	23.0	14.6	19.0	36	74	30.40	29.50	30.01	920	3.68	14	248	6.71
November	25.1	18.1	21.3	51	80	30.31	29.65	30.00	801	3.20	19	212	5.12
December	25.6	17.9	21.8	45	78	30.32	29.55	29.95	783	3.13	17	257	7.03
						Total Rainfall			12,119	48.47			

II VITAL STATISTICS

Population (Estimated):

	1961	(Ratio)	1960	(Ratio)
Europeans	166,116	27.56%	163,000	28.09%
Coloureds	25,640	4.25%	24,800	4.27%
Bantu	186,863	31.00%	181,700	31,31%
Asiatics	224,227	37.19%	210,800	36.33%
	602,846		580,300	

Births:

RACE	LEGITIMATE				ILLEGITIMATE				TOTALS			
	M.	F.	Total 1961	Total 1960	M.	F.	Total 1961	Total 1960	M.	F.	Total 1961	Total 1960
European	1,609	1,500	3,109	3,108	67	50	117	69	1,676	1,550	3,226	3,177
Coloured	465	476	941	748	110	122	232	242	575	598	1,173	990
Bantu	1,164	1,033	2,197	2,199	1,916	1,866	3,782	3,665	3,080	2,899	5,979	5,864
Asiatic	3,539	3,663	7,202	5,959	54	56	110	95	3,593	3,719	7,312	6,054
Total	6,777	6,672	13,449	12,014	2,147	2,094	4,241	4,071	8,924	8,766	17,690	16,085

CRUDE BIRTH RATES: (1960 in parenthesis)

European	19.42	(19.75)
Coloured	45.75	(40.56)
Bantu	32.00	(33.42)
Asiatic	32.61	(29.31)
All Races	29.34	(28.39)

STILLBIRTHS

	Number		Rates	
European	30	(43)	9.30	(13.53)
Coloured	22	(16)	18.76	(16.16)
Bantu	222	(209)	37.13	(35.64)
Asiatic	158	(124)	21.61	(20.48)
All Races	432	(392)	24.42	(– –)

The birth rates amongst the European, Coloured and Bantu continue to remain fairly constant. The Asiatic group which had shown a steady decline for a number of years now appears to have levelled out.

DEATHS:

	Total Deaths				Crude Death Rates	
	M.	F.	Total	(1960)	1961	(1960)
European	931	705	1,636	(1530)	9.85	(9.39)
Coloured	136	112	248	(226)	9.67	(9.11)
Bantu	1,330	1,037	2,367	(3307)	12.67	(18.20)
Asiatic	977	729	1,706	(1557)	7.61	(7.39)
All Races	3,374	2,583	5,957	(6620)	9.88	(11.41)

The Bantu figures do not appear to be in keeping with those of the previous year, and can only be corrected when information becomes available at a later date from the Director of Census and Statistics, Pretoria. The Asiatic rate has halved over the past two decades.

INFANT MORTALITY RATE:

(Deaths of infants under the age of 1 year per 1,000 live births)

		(1960)
European	20.34	(15.42)
Coloured	49.52	(50.51)
Bantu	167.10	(246.40)
Asiatic	58.99	(59.46)
All Races	87.26	(118.37)

The Bantu continues to show a dramatic decline and child clinics, better housing, basic sanitation and nutrition for this race are obviously having a marked effect on the expectancy of life. Since 1942 the infant mortality has decreased by more than 50%. At that time the rates for Europeans, Coloureds, Bantu and Asiatics were 45.9, 115.4, 397.54 and 110.19 respectively.

MATERNAL MORTALITY RATE:

(Deaths from causes related to childbirth per 1,000 live births)

	Deaths	Rate	(1960)
European	3	0.93	(0.62)
Coloured	-	-	(1.01)
Bantu	14	2.34	(1.88)
Asiatic	15	2.05	(2.31)
All Races	32	1.81	(1.74)

PRINCIPAL CAUSES OF DEATH:

The principal causes of death, grouped for convenience, are shown below in tabular form. The percentages given express the relation of each cause to the total deaths in each ethnic group, and for all races. 1960 figures in parenthesis.

(1) In respect of All Deaths.

Cause of Death	European				Coloured				Bantu				Asiatic				Total			
	No.		%		No.		%		No		%		No.		%		No.		%	
Tuberculosis (All forms) (001–019)	15	(14)	0.92	(0.91)	16	(12)	6.45	(5.31)	165	(234)	6.97	(7.02)	56	(38)	3.28	(2.44)	252	(298)	4.23	(4.50)
Neoplasms (140–239)	260	(228)	15.89	(14.90)	20	(17)	8.07	(7.52)	86	(100)	3.63	(3.02)	83	(61)	4.86	(3.91)	449	(406)	7.54	(6.13)
Vascular Lesions of C.N.S. (330–334)	170	(152)	10.39	(9.93)	17	(13)	6.85	(5.75)	66	(73)	2,79	(2.21)	168	(133)	9.85	(8.54)	421	(371)	7.07	(5.60)
Heart & Circulatory System (400–468)	592	(586)	36.19	(38.30)	45	(35)	18.16	(15.49)	148	(235)	6.25	(7.11)	331	(384)	19.40	(24.66)	1060	(1240)	17.79	(18.73)
Pneumonias (490–493)	100	(141)	6.11	(9.21)	24	(25)	9.68	(11.06)	353	(610)	14.91	(18.44)	351	(338)	20.57	(21.71)	828	(1114)	13.90	(16.83)
Enteritis and Diarrhoea (571–2)	3	(5)	0.18	(0.33)	18	(16)	7.26	(7.08)	252	(532)	10.65	(16.09)	96	(112)	5.63	(7.19)	369	(665)	6.19	(10.05)
Road Accidents (810–835)	41	(29)	2.51	(1.89)	9	(6)	3.63	(2.65)	92	(73)	3.89	(2.21)	26	(36)	1.52	(2.31)	168	(144)	2.82	(2.18)
Ill-defined and Unknown (780-793 795)	127	(77)	7.76	(5.03)	12	(16)	4.84	(7.08)	272	(393)	11.49	(11.88)	92	(39)	5.39	(2.50)	503	(525)	8.44	(7.93)

(2) In respect of Infants (under 1 year).

Cause of Death	European				Coloured				Bantu				Asiatic				Total			
	Np		%		No.		%		No.		%		No.		%		No.		%	
Tetanus (061)	–	–	–	–	–	–	–	–	25	(33)	2.60	(2.28)	1	(2)	0.24	(0.55)	26	(35)	1.73	(1.81)
Avitaminosis and Nutritional Deficiencies (280–286)	–	–	–	–	1	–	1.75	–	26	(47)	2.70	(3.25)	2	(4)	0.48	(1.11)	29	(51)	1.91	(2.63)
Pneumonias (490–493)	4	(4)	6.15	(5.00)	8	(6)	14.04	(12.00)	188	(337)	19.44	(23.32)	94	(103)	22.27	(28.61)	294	(450)	19.52	(23.29)
Enteritis and Diarrhoea (571–2)		(3)	–	(3.75)	13	(8)	22.81	(16.00)	178	(382)	18.50	(26.44)	70	(69)	16.59	(19.17)	261	(462)	17.33	(23.91)
Congenital Malformations (750–9)	1	(11)	1.54	(13.75)	1	(3)	1.75	(6.00)	6	(16)	0.62	(1.11)	10	(10)	2.37	(2.78)	18	(40)	1.20	(2.07)
Post Natal Asphyxia (762)	14	(8)	21.54	(10.00)	3	(6)	5.26	(12.00)	23	(39)	2.39	(2.69)	15	(14)	3.55	(3.88)	55	(67)	3.65	(3.47)
Infections of Newborn (763)–8)	—	(14)	–	(17.50)	3	(6)	5.26	(12.00)	50	(31)	5.19	(2.14)	58	(19)	13.74	(5.28)	111	(70)	7.37	(3.62)
Ill-defined & Prematurity (773–6)	28	(31)	43.08	(38.75)	21	(14)	36.84	(28.00)	188	(204)	19.54	(14.11)	106	(75)	25.12	(20.83)	343	(324)	22.78	(16.77)

III INFECTIOUS DISEASES

Infectious Diseases Notifications

No case of formidable epidemic disease was notified during the year.

Set out below is a table showing the numbers and the racial distribution of the confirmed cases of notifiable infectious diseases. No mention is made of the numerous suspect cases which, upon investigation, were found not to be infectious.

The attack rate per 1,000 population is shown in parenthesis.

Disease	European	Coloured	Bantu	Asiatic	Total
Cerebro-spinal Meningitis	1	–	4	1	6 (.0100)
Diphtheria	8	4	63	28	103 (.1709)
Encephalitis	12	1	2	1	16 (.0266)
Erysipelas	3	–	1	–	4 (.0066)
Gonococcal Ophthalmia	1	–	39	10	50 (.0829)
Leprosy	1	–	7	2	10 (.0166)
Malaria	–	–	–	2	2 (.0033)
Poliomyelitis	3	3	21	2	29 (.0481)
Puerperal Sepsis	6	2	46	8	62 (.1028)
Scarlet Fever	108	1	–	–	109 (.1808)
Typhoid	2	2	39	16	59 (.0979)

General

The marked improvement in the incidence of typhoid fever in the Bantu Section of the population has been maintained this year as was to be expected with the provision of better housing and sanitary conditions. Notifications of diphtheria were still high, particularly in the pre-school age group where the level of immunity is still very low. A substantial decrease in the number of poliomyelitis cases was probably in large measure a result of the poliomyelitis immunisation campaigns of 1960 and 1961. There was a further reduction in the number of scarlet fever cases notified. Two cases of malaria in which the infection may have been contracted in Durban, occurred during the year.

Smallpox

There were no cases of smallpox in Durban although several reports of suspect cases were received and immediately investigated.

Typhoid Fever

The number of notifications of City cases of typhoid fever since 1955 is set out in the table below according to their racial distribution.

	1955	1956	1957	1958	1959	1960	1961
European	8	5	6	7	6	8	2
Coloured	3	1	1	5	1	4	2
Bantu	73	52	110	246	280	71	39
Asiatic	16	9	5	20	16	7	16
Total	100	67	122	278	303	90	59

There were three deaths from typhoid fever amongst City cases during the year, 2 Bantu and 1 Asiatic, compared with 4 in 1960 and 24 in each of the preceding two years. In all three cases the diagnosis was made at post mortem examination and the condition was complicated by other pathology. None of the 59 notified cases had been previously immunised against typhoid.

There has been a marked reduction in the incidence of typhoid in the Bantu section of the population, while amongst the other racial groups the number of cases remained much the same. The reduction in the number of Bantu cases occurred only in the Cato Manor area, both in the Emergency Camp and in the neighbouring shack areas. In 1961 only 14 cases were notified from this Cato Manor area compared with 55 in 1960 and 229 in 1959. This can be attributed not only to the reduction in the population of this area but also to the demolition of the worst shack areas within which no sewerage existed and extremely poor sanitary conditions prevailed.

Eight cases of typhoid came from the new Bantu township of kwaMashu compared with 2 in 1960. This was not altogether unexpected in view of the rapid growth of the population and the fact that most of the residents came from the Cato Manor area, some presumably carrying the infection with them. Seventeen Bantu cases came from the rest of the City compared with 14 in the preceding year.

Generally cases occurred sporadically throughout the year but unlike previous years the highest incidence was in the cooler months, 71% of the cases having occurred during the months of May to October.

Each case of typhoid was carefully investigated and during the year three carriers were found amongst the contacts of notified cases. In addition to these carriers a further case of typhoid responded well to treatment but has remained a faecal carrier despite intensive therapy with different antibiotics.

Three of the Asiatic cases were members of the same family and lived in the same house. Intensive investigation failed to reveal the original source of infection but it was considered that two of the cases contracted the disease from the first case who was ill at home for some time before being admitted to hospital.

Early in the year four European cases of typhoid, three children and one young adult, were notified. All four cases had recently returned from holiday at a guest establishment outside the Borough and the investigation there was conducted by the State Health Department. These four cases have not been included in the figures for City cases quoted above. A list of all Durban residents who might have been exposed to infection while staying at the same establishment was obtained. This comprised 86 families from all parts of Durban. These contacts were all followed up, and kept under surveillance but no further cases were found.

During the year several cases, mostly from outside the Borough, who were found to be active excretors of the bacillus after clinical recovery, were treated in a Provincial hospital with a new oral broad spectrum penicillin. The initial results appeared to be good and further work is being continued.

Diphtheria

Notifications of City cases numbered 103, comprising 8 European cases, 4 Coloureds, 63 Bantu and 28 Asiatics. The total represents an increase of 9 cases on that of the previous year, but as may be observed from the subjoined table of notifications and deaths, the number of cases notified is appreciably lower than occurred in any of the preceding five years. Fourteen deaths from diphtheria were recorded, 11 Bantu and 3 Asiatic. Amongst the deaths there were 1 child aged 7 years, 1 aged 5 years and the remainder were all under 3 years of age.

Eight of the notifications related to carriers of which there were 1 European, 5 Bantu and 2 Asiatics. Three of these carriers had previously been immunised. Of the remaining cases of diphtheria 2 babies had received 1 immunising dose only and 2 children over 10 years of age had been immunised in the first year of life but had received no booster dose. None of the cases who died had received any immunisation against diphtheria.

DIPHTHERIA : NOTIFICATIONS AND DEATHS : 1940 to 1961.

(Notification Rate per 1,000 Population : Mortality Rate per cent. of Total Notifications)

Year	EUROPEAN				COLOURED				BANTU				ASIATIC				ALL RACES			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1940	194	2.10	3	1.55	21	2.60	–	0.00	16	1.23	2	12.50	23	0.26	1	4.35	254	0.98	6	2.36
1	228	2.44	5	2.19	18	2.18	–	0.00	42	0.59	7	16.67	8	0.09	1	12.50	296	1.13	13	4.39
2	262	2.48	2	0.76	26	3.07	1	3.85	63	0.85	4	6.35	14	0.15	–	0.00	365	1.30	7	1.92
3	295	2.76	9	3.05	24	2.80	2	8.33	44	0.60	2	4.55	15	0.16	3	20.00	378	1.34	16	4.23
4	416	3.84	7	1.68	74	8.43	–	0.00	73	1.01	16	21.92	36	0.37	2	5.56	599	2.09	25	4.17
5	255	2.33	6	2.35	36	4.01	1	2.78	116	1.61	9	7.76	37	0.37	–	0.00	444	1.53	16	3.60
6	154	1.23	7	4.55	17	1.66	1	5.88	64	0.59	7	10.94	38	0.33	10	26.32	273	0.76	25	9.15
7	156	1.23	4	2.56	24	2.26	2	8.33	110	1.01	9	8.18	46	0.39	7	15.22	336	0.92	22	6.55
8.	73	0.57	1	1.37	8	0.73	–	0.00	93	0.85	12	12.90	18	0.15	5	27.78	192	0.52	18	9.37
9	95	0.73	–	0.00	21	1.85	2	9.52	66	0.60	12	18.18	39	0.32	6	15.38	221	0.59	20	9.05
1950	145	1.10	1	0.69	34	2.65	2	5.88	124	0.97	18	14.52	58	0.45	7	12.07	361	0.90	28	7.75
1	58	0.45	2	3.45	14	0.94	2	14.29	150	1.12	24	16.00	47	0.32	11	28.40	269	0.63	39	14.50
2	50	0.38	4	8.00	7	0.45	–	0.00	103	0.73	19	18.45	51	0.34	11	21.57	211	0.48	34	16.11
3	39	0.28	2	5.13	26	1.51	5	19.23	76	0.51	19	25.00	49	0.32	11	22.45	190	0.41	37	19.47
4	25	0.17	1	4.00	8	1.44	–	0.00	48	0.30	6	12.50	19	0.12	–	0.00	100	0.21	7	7.00
5	75	0.50	1	1.33	34	1.82	2	5.88	102	0.61	16	15.69	69	0.42	15	21.74	280	0.56	34	12.14
6	70	0.46	5	7.14	13	0.67	1	7.69	43	0.24	17	39.53	69	0.42	12	17.39	195	0.37	35	17.95
7	38	0.25	4	10.53	5	0.21	–	0.00	37	0.21	11	29.73	31	0.16	3	9.68	111	0.20	18	16.21
8	38	0.25	3	7.89	6	1.24	–	0.00	57	0.31	13	22.81	70	0.34	15	21.43	171	0.30	31	18.13
9	24	0.15	–	0.00	12	0.46	1	8.33	55	0.29	4	7.27	24	0.11	5	20.83	115	0.19	10	8.69
1960	9	0.06	1	11.11	7	0.28	–	–	56	0.31	6	10.71	22	0.10	4	18.18	94	0.16	11	11.70
1	8	0.05	–	0.00	4	0.16	–	0.00	63	0.34	11	17.46	28	0.12	3	10.71	103	0.17	14	13.59

Seventy per cent of the cases occurred in the pre-school group under the age of 5 years, and it is evident that in this group the level of immunity is poor, particularly amongst the non-European population. It is estimated that approximately 51% of children in Durban between the ages of 5 and 14 years have completed a course of immunisation against diphtheria whereas between the ages of 1 and 4 years only 23% of such children have been immunised. Immunisiation is regularly carried out by this Department in schools but it is necessary for the pre-school child to be brought to a child health clinic of immunisation, and despite the facilities that are made available and intensive health education of the public through the media of models, visual aids loud speaker and loud hailer talks, it will be necessary to achieve a much higher degree of immunity in this group for adequate control of the disease.

Poliomyelitis

Twenty-nine cases of poliomyelitis were notified during the year which represents a decrease of 18 on the figures for the preceding year. The table below sets out the racial distribution of the cases notified since 1956.

	1956	1957	1958	1959	1960	1961
European	82	113	13	23	9	3
Coloured	18	7	1	–	1	3
Asiatic	26	16	7	21	8	2
Bantu	32	27	6	7	29	21
Total	158	163	27	51	47	29

The disease followed the same pattern as in 1960 with the highest incidence amongst the Bantu section of the population and a marked reduction in the number of European cases. Cases occurred sporadically throughout the first 9 months of the year but from 21st September to the end of the year no cases were reported. During the year the Department conducted mass immunisation campaigns in May, July and September using the polyvalent oral vaccine (Sabin) and although it is too early to draw any definite conclusions it is considered that the resultant high levelof immunity in the susceptible population has materially reduced the incidence of the disease

Twelve of the 29 cases had been vaccinated against poliomyelitis but 9 of these cases had received only one dose of the oral vaccine. One case had received two injections of the Salk vaccine, one had three doses of the Sabin vaccine and the remaining cases had three injec tions of the Salk and one dose of the Sabin vaccine.

Specimens of blood and stool from all cases of poliomyelitis were forwarded to the Poliomyelitis Research Foundation for virus studies, accompanied by full details of any immunisation against the disease. Results of these investigations have been received in 21 of the 29 cases and in 15 of these polio virus type 1 was isolated. No polio virus was identified in specimens from the remaining 6 cases, which included the 3 cases mentioned above who had received more than one dose of vaccine.

Twenty out of the total of 29 cases occurred in the under 2 years age group and with the exception of 2 European cases, all were under the age of 10 years.

Two deaths occurred from poliomyelitis. One was a Bantu child aged 6 months who was also suffering from gastro-enteritis and malnutrition. Type 1 poliomyelitis was isolated from a stool specimen. The other was a Bantu child aged 22 months who died shortly after admission to hospital and from whom no specimens were sent for laboratory examination. Neither of these two cases had been immunised.

Encephalitis

Only 16 cases of encephalitis were notified during the year, comprising 12 Europeans, 1 Coloured, 2 Bantu and 1 Asiatic, compared with 51 and 42 in the preceding 2 years. One of the cases occurred as a complication of measles and another followed an attack of mumps. In the remaining 14 cases no definite aetiology was established.

In view of the number of cases notified in 1959 and 1960 every case which occurred in 1961 was more fully investigated in order to try and establish a link between the cases and the cases and the prevalence of mosquitoes or other anthropoda. The number of cases however in

1961 was small and the results of investigation equivocal. In 75% of the cases adult mosquitoes or mosquito breeding were found in or near the house and those that were identified were all Culicine except in one case where Aedes larvae were found. Few of the cases could remember having been bitten by mosquitoes although most of them stated that mosquitoes had been seen in the house or the immediate neighbourhood.

Two deaths from encephalitis, 1 European and 1 Coloured, were recorded.

Scarlet Fever

One Coloured and 108 European cases of scarlet fever were notified to the Department during the year which represents a decrease of 9 on the figures for 1960. Four of the cases were young adults but over 80% were under the age of 10 years. Sixty-three cases were admitted to hospital and the remainder were nursed at home. The cases were distributed throughout the Borough, 18 came from the Bluff area, 29 from the Southern suburbs, 15 from the Northern suburbs and the remaining 52 from the central area. There were no deaths from the disease.

Malaria

In July an Indian woman aged 27 and her young sister aged 8 years were found to have Falciparum malaria, in a Provincial hospital. Both cases had been ill for over two months when the diagnosis was made.

The two sisters lived in a house at Fynnland situated close to the Bay on the railway line immediately adjacent to the new reclaimed land adjoining the causeway to Salisbury Island, and less than half-a-mile from the oil tankers berths on the oil sites channel.

Repeated interrogation of both cases, the first case's husband, the father and other members of the family failed to elicit any information in regard to movements of these two outside of Durban except for a brief visit to Ladysmith 3 years previously. The family group and members of other families in the immediate vicinity were medically examined but none were ill, none had enlarged spleens and blood specimens were all negative. A limited survey of all Indian families living in the area and other Indian families who until recently bad been living in a shack area on the reclaimed land in front of the Fynnland house failed to elicit any history of recent illness suggestive of malaria.

Intensive mosquito surveys were carried out but no anophelene larvae or adults were located. With the approach of warmer weather a very close watch was maintained. Mosquito breeding occurred throughout the entire year, the cooler months merely tending to slow down the cycle of development. This work was carried out in close co-operation with the South African Railways health staff.

Although consideration was given to the possibility of these two cases failing to reveal information in regard to an illicit visit to a malarial area and to the possibility of the presence of an "imported" infected mosquito from an oil tanker or from a train, in the absence of any concrete evidence these cases have been accepted as having contracted the disease locally.

During the year 15 imported malaria cases were treated in local hospitals. Eight of these cases were taken directly to hospital from outside the Borough. Of the remainder 3 had recently returned from Portuguese East Africa, 1 from India and 3 from Northern Zululand.

IV OTHER COMMUNICABLE DISEASES

Rabies

Although one or two outbreaks have been recorded in South Africa in the past among domestic dogs in urban areas, the disease for the past 50 years has been mainly prevalent among small veld carnivorae, such as meerkats (mongoose) and genets. Since 1938, about 100 human cases have been recorded in South Africa. Some 10 years ago infection in dogs made its appearance in the Northern and Eastern Transvaal, having spread from either Rhodesia or Bechuanaland and in those areas a wide variety of mammals have been infected. Isolated cases had occurred amongst dogs in Northern Zululand.

In April, 1961, a fatal case of human rabies occurred in Zululand near the Portuguese border. By 27th October about 110 persons in Zululand had been bitten under suspicious circumstances and there were 6 human deaths. A large number of dogs were investigated and 18 were found on laboratory examination to have had rabies. The Department of Agriculture and the State Health Department, in an endeavour to confine the spread of the disease instituted control measures. The whole of Zululand was declared a rabies infected area under the Animal Diseases and Parasites Act. A large number of dogs were immunised and thousands of ownerless and stray dogs were destroyed. Restrictions were placed on the movement of dogs into and out of the area.

The infection appeared to be confined to Zululand but in the last week of October 2 canine cases were reported from Pietermaritzburg and 1 in Vryheid. This brought the disease within striking distance of Durban with its large canine population.

Certain preventive measures were immediately instituted. Centres for the treatment of persons bitten by suspected animals were established at two Provincial hospitals. Supplies of Semple vaccine and anti-serum were made available to these centres by the State Health Department. It was considered that the public should be fully informed so that the risks of being bitten by infected animals should be minimised. Considerable publicity was given in the press and over the radio by this Department. The necessity of keeping dogs at home or controlling them on leashes if taken on the streets and public places, and of reporting any unprovoked bites by suspected dogs was stressed. Through the co-operation of the Director of Education all schools instructed children in the dangers of the disease and the preventive measures to be taken. An intensive campaign of health education was instituted in the Bantu, Indian and Coloured communities by health educators of this Department. All medical practitioner were supplied with a circular giving details of the arrangements made and treatment recommended. The S.P.C.A. were asked to intensify their efforts to round up stray dogs and cats from the various non-European areas and in this work they were assisted by publicity given by health educators in order to obtain the co-operation of the public, and also by a grant-in-aid from the Council to cover the salary of an additional inspector.

It was considered essential, however, that facilities should be made available immediately for the large-scale immunisation of dogs in Durban before the infection actually reached the City. Unfortunately it was learned that the vaccine produced by the State Veterinary Department at Onderstepoort was in short supply in view of the large numbers of vaccinations which had been carried out in Zululand and Pietermaritzburg and also that that Department was short of personnel. On 3rd November His Worship the Mayor despatched a telegraphic request to the State Department of Agriculture calling for the immediate establishment of dog vaccination facilities in Durban and asking for the importation of vaccine if necessary. The services of Corporation personnel to assist Government teams were offered. This matter was also stressed at a meeting held in Durban by the Secretary for Health at which Government, Provincial and Local Authority officials were present. The Secretary for Health undertook to urge upon the Secretary for Agriculture the necessity for importing vaccine and otherwise increasing the output in South Africa.

On 17th November, by which date several more positive cases amongst animals had been reported from Pietermaritzburg and surrounding districts, the whole of Natal was gazetted as a rabies infected area. This meant that the movement of dogs in and out of Natal and from district to district within Natal was prohibited and could only be carried out on production of a veterinary certificate. Also certain powers were vested in State Veterinarians including the summary destruction of dogs not properly controlled.

A supply of duck embryo anti-rabies vaccine was made available by the State Health Department for the pre-exposure prophylactic immunisation of veterinarians and other dog handlers who might be at special risk, and a number of persons took advantage of this facility including personnel of this Department. This vaccine, however, was not recommended in the treatment of contact cases, where the proven Semple vaccine was preferred.

Inoculation Campaign.

Inoculation of dogs commenced on 4th December at a control depot in Durban and continued there until the 15th. From 18th December two teams continued independently at different centres throughout the City. As more vaccine became available more teams were put into operation until five teams were functioning. Personnel from this Department were seconded to each team to assist, mainly with the clerical work and the mixing of the vaccine. By the end of December 15,010 dogs were vaccinated by these teams and in addition a further 4,041 were vaccinated by private veterinary practitioners. Throughout this period wide publicity was given by the press and by health education personnel. Public response to appeals to control their pets was good and the number of uncontrolled dogs on the streets greatly diminished.

The S.P.C.A. made continued efforts in rounding up stray dogs and cats and by the end of the year 3,511 animals had been removed.

During November and December 129 cases of dog bites or reports of vicious or suspect dogs in the Municipal area were reported to the State Veterinary Officer by hospitals, medical practitioners and the public. All these cases were followed up, the dogs were examined directly and kept under observation by the State Veterinary Officer assisted where necessary by the Veterinary Medical Officer of this Department.

In 4 suspicious cases brain samples were sent to Onderstepoort for examination and in one of these the diagnosis of rabies was confirmed on histological and biological examination. Two human contacts were given a prophylactic course of vaccine treatment.

By the end of the year although many further cases of animal rabies had been reported from Zululand and from Pietermaritzburg no more cases had been discovered in Durban.

When it is borne in mind that the canine population of Durban is upwards of 50,000 dogs, the fact that the disease was kept out of the City bears striking testimony to the prompt control measures taken. Undoubtedly the most important of these were –

(1) The wide publicity given and the free dissemination of knowledge, and here particular tribute must be paid to the Press and Radio South Africa for their fine co-operation.

(2) The canine inoculation campaign.

Food Poisoning

There were no outbreaks of food poisoning during the year in hotels or restaurants, although two minor occurrences in hotels were investigated. In both these instances nothing was found to suggest a source from within the establishments concerned.

In January 13 members or a Boy Scout Company were treated at a local hospital for suspected food poisoning and of these 9 were admitted to hospital. Investigation at the Scout Camp revealed some unsatisfactory conditions in regard to storage of perishable foodstuffs. Two Companies of Scouts were in camp at the time but scouts from only one company were affected and foodstuffs for this company were ordered in bulk and retained in storage. The unaffected company purchased perishable foodstuffs immediately prior to use and relied otherwise on canned commodities. Detailed investigation showed that the most likely source of infection was salt beef which had been cooked for supper one evening and eaten cold for lunch and supper the following day. None was left over and thus no bacteriological examination could be carried out. All the patients made a rapid recovery and stool examinations were negative. Unfortunately no specimens of vomitus were retained for investigation. Whilst the short incubation period pointed to a staphylococcal food poisoning a salmonella infection could not be excluded and the prevailing heatwave together with the presence of rodent infestation made the latter the more likely.

In October an outbreak of food poisoning in an Asiatic household led to the death of one child and illness in 7 others. The source of infection was traced to the eating of sheep trotters infected by shigella flexner II. The trotters had been bought and cooked on one day and consumed the following evening, but not kept under refrigeration in the meantime.

A further outbreak occurred in December when 8 persons were poisoned with sodium nitrite which was inadvertently used as salt by an Indian woman who was cooking a meal for her family. One of the children who took ill died before admission to hospital. The remaining 6 children and one adult had all complained of abdominal pain and vomiting which started shortly after the meal. In hospital they were all found to be deeply cyanosed and slightly stuperose. Gastric lavage was carried out and methylene blue 2 mgm per kilo body weight injected intravenously. The cyanosis rapidly disappeared and the following day all were well. Investigations established that the sodium nitrite was the residue in an empty tin obtained by the father of the children from his place of employment, where it was used as an agent in the curing of meat products. Appropriate steps were taken to avoid a recurrence of the incident. Samples of the firm's meat products were found to comply with the requirements of the Regulations framed under the Food, Drugs and Disinfectants Act in respect of the nitrite content.

Amoebiasis

This disease is still the subject of intensive research and I am indebted to the Director of the Amoebiasis Research Unit in Durban for the following information :-

> "During the year Dr. R. Elsdon-Dew, Director of the Amoebiasis Research Unit, paid a visit to North and South America in order to assess the position of amoebiasis in the various cities there.
>
> It would seem that there is no correlation between the incidence of the parasite and the incidence of disease. This was to be expected from our experience in Durban, and is a confirmation of our thesis that E.histolytica is normally a commensal and that there is some other factor which precipitates the disease. It would seem that this factor causes a change in the feeding habits of the amoebae almost to the extent of a mutation and its exact nature has still to be determined.
>
> Though there were many places with an incidence as high or higher than that of Durban, it was only one place in which the disease position approximated that to be seen here. This was Mexico City which does not seem to have many factors in common with Durban, except that it is a city which has grown at an enormous speed against a background of a comparatively poor peasant population.
>
> Further tours to the remainder of the world are contemplated by WHO, and it is to be hoped that these will place the disease in its proper perspective."

Medical Examination of Bantu Seeking Registration

The following information has been kindly furnished by the Medical Officer, Municipal Department of Bantu Administration :-

> "Medical examinations carried out at Head Office, Ordnance Road, during 1961, totalled 84,450. These comprised 76,249 adults and 8,201 juveniles. 75,366 vaccinations against Smallpox were carried out. The number of Bantu referred to hospital for investigation and treatment was 12,034 of which 10,040 were Venereal Disease, 73 were Tuberculosis, 92 were Bilharzia, 22 were Scabies, 4 were Chickenpox and 3 Ringworm. There appears to be a very marked drop in the cases of scabies.
>
> The nutritional standard appears to be quite good and the general standard of clothing is also good. The Urban Bantu appears to be in fairly reasonable condition."

V TUBERCULOSIS

INTRODUCTION:

The number of known cases of pulmonary tuberculosis in Durban at the end of 1961 is set out in the table below, the figures for the previous year being given in aparenthesis.

European	827	(748)
Coloured	638	(557)
Bantu	6891	(5963)
Asiatic	2731	(2357)
Total	11087	(9625)

These figures include cases who work in Durban but are domiciled outside of the City and also those who had come to live in the City shortly before they were diagnosed and notified as tuberculosis sufferers. Those cases however who live and work on Government property within the City are not included. Case records are periodically reviewed and corrections are made for inward and outward transfers, but with frequent changes of address particularly amongst the Bantu group, who are on the move within the City and to and from the rural areas, the record cannot be regarded as accurate.

On 1st October, 1961 the Chatsworth area was incorporated within the Borough of Durban. Sixty-eight Bantu and forty-seven Asiatic cases of pulmonary tuberculosis were at the time living in this area and this number has been included in the list of known cases.

STATISTICS OF CITY CASES:

Pulmonary Tuberculosis

Set out below is a table of City cases notified during 1961 together with the figures for 1960. The racial group and the attack rate (per 1000 population) are also indicated.

	E.	C.	B.	A.	Total
Notifications 1961	121	100	1940	434	2595
Notifications 1960	111	104	1542	356	2113
Attack Rate 1961	0.73	3.90	10.38	1.94	4.30
Attack Rate 1960	0.68	4.19	8.48	1.69	3.64

The age groups of the City cases notified during 1961 were as follows:-

Under 5 years	3	32	521	76	632
5 – 14 years	3	9	228	76	316
14 – 24 years	12	11	213	89	325
24 – 44 years	37	31	698	123	889
44 – 64 years	47	11	243	62	363
Over 64 years	19	6	37	8	70
Totals	121	100	1940	434	2595

Deaths amongst City cases together with the death rate (per 1000 population) and the previous year's figures are given in the table below :-

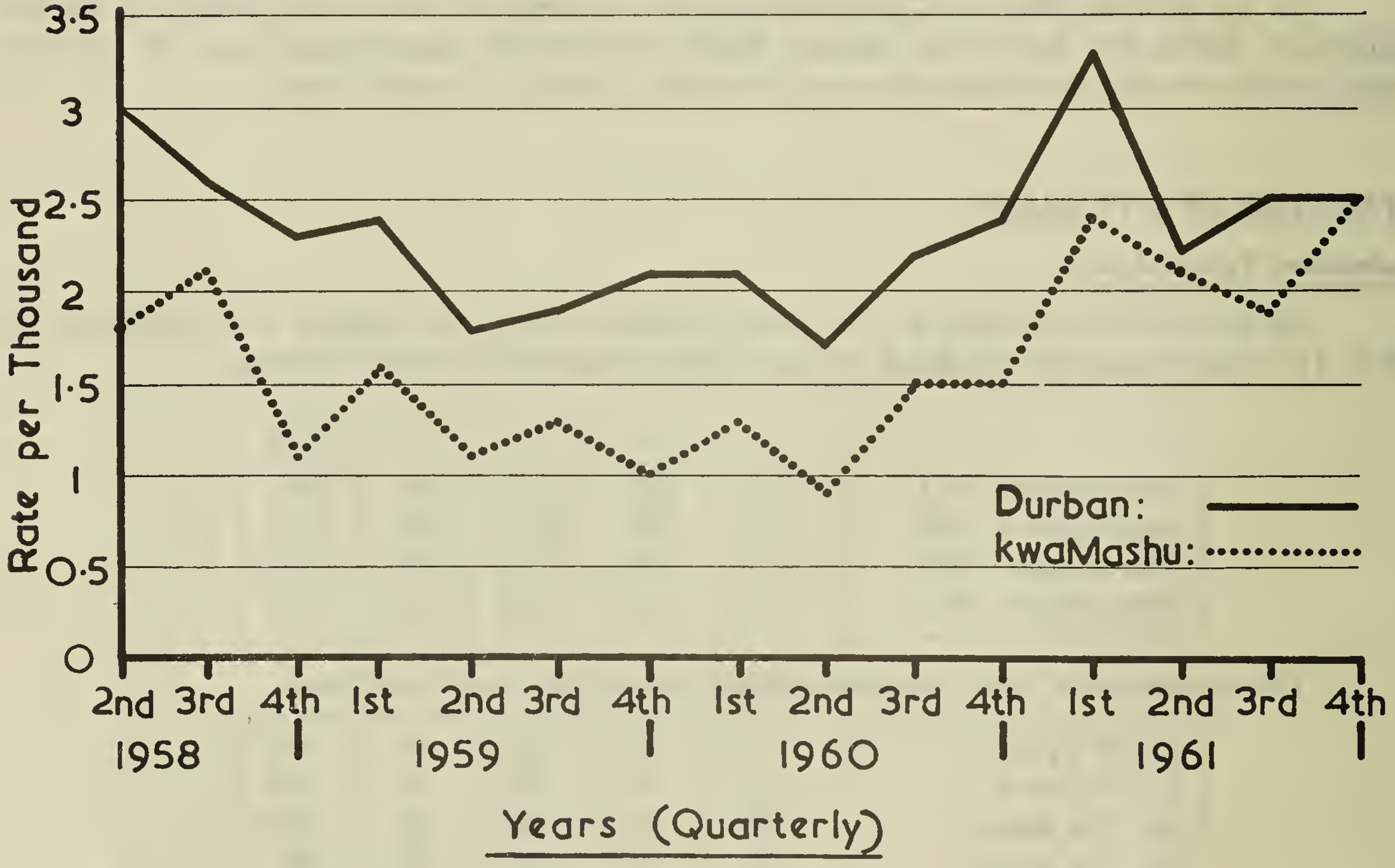
Deaths 1961	14	13	129	42	198
Deaths 1960	13	11	193	21	238
Death rate 1961	.08	.51	.69	.19	.33
Death rate 1960	.08	.44	1.06	.10	.41

It will be noted that there has been a material increase in the number of notifications and correspondingly in the attack rate in the Bantu and Asiatic groups while the numbers of European and Coloured notifications have remained much the same. This increase occurred mainly in the under 5 years and 5 – 14 years age groups and can be attributed to improved case finding facilities. In December, 1960 the Durban Chest Clinic arranged for a special clinic for young Bantu and Asiatic children and from the beginning of 1961 this clinic was very well attended. The notifications were in almost every case in respect of primary infections in these children. In addition two new clinics were opened during the year, one at Cato Manor and one at kwaMashu, and these improved facilities undoubtedly led to an increase in the number of notifications.

Of the Bantu cases notified 434 were from the new Bantu Township of kwaMashu compared with 138 in the preceding year. What appears to be rather an alarming increase in the incidence of pulmonary tuberculosis in this township can be accounted for by the increase in population and to the improved facilities for case finding mentioned above. The graph depicted below shows the attack rates per 1000 population per quarter in kwaMashu compared with the whole of Durban for the Bantu group, from 1958 to 1961

PULMONARY TUBERCULOSIS: BANTU

Quarter Year Attack Rates (per 1000 Population) in Durban and kwaMashu: April, 1958 to Dec., 1961



Although the number of deaths amongst European and Coloured cases remained much the same as occurred in 1960, there was an increase in the number of Asiatic deaths which is not significant when compared with the preceding few years. The death rate however in the Bantu section of the population was much lower than has been recorded since the war.

Non-Pulmonary Tuberculosis:

The number of notifications of non-pulmonary tuberculosis is set out below, together with the correspohding figures for 1960

	E.	C.	B.	A.	Total
1961	1	4	102	44	151
1960	3	4	65	45	117

The age groups of the cases notified in 1960 were as follows:-

	E.	C.	B.	A.	Total
Under 5 years	–	2	11	5	18
5 – 14 years	–	1	17	3	11
14 – 24 years	1	–	16	11	28
24 – 44 years	–	–	44	19	63
44 – 64 years	–	–	17	5	22
Over 64 years	–	1	7	1	9

The number of deaths from non-pulmonary tuberculosis and the death rate for 1000 population are recorded below.

Deaths 1961	1	2	32	14	49
Deaths 1960	1	1	41	17	60
Death Rate 1961	.006	.078	.171	.063	.081
Death Rate 1960	.006	.040	.230	.080	.103

There has been an increase in the number of Bantu cases notified but the figures on th whole are not regarded as reliable as failure to notify these cases done not appear to be uncommon The number of Bantu deaths is lower than has occurred during the preceding five years

HOSPITAL FACILITIES:

Set out below is a list of the hospitals and settlements admitting cases from Durban showing the beds set aside for cases of pulmonary tuberculosis in respect of the different races

Hospital/Settlement	Controlling Authority	Bed Capacity				
		E.	C.	B.	A.	Total
Applebosch	Church of Sweden	Nil	Nil	45	If necessary	45
Benedictine Mission Hospital	Roman Catholic Church	Nil	Nil	150	Nil	150
Dannhauser Hospital	Private Company	Nil	Nil	255	Nil	255
Ekuphilisweni Home of Healing	Healing Home of African Association	Nil	Nil	87	Nil	87
F.O.S.A. Settlement Newlands	F.O.S.A. Association, Durban.	Nil	If necessary	10	146	156
Illovo Hospital	Natal Sugar Estates	Nil	Nil	50	Nil	50
King George V Hospital	Secretary for Health	97	76	1370	76	1619
Lilleshall, Rosetta	Natal Anti-Tuberculosis Association	26	Nil	Nil	Nil	26
McCord Zulu Hospital	McCord Zulu Hospital Board, Durban.	Nil	Nil	60	Nil	60
Montebello Mission Hospital	Roman Catholic Church	Nil	Nil	70	Nil	70
St. Appolinaris Mission Hospital Centacow	Roman Catholic Church	2	If necessary	40	If necessary	42
St. Francis Hospital	Roman Catholic Church	2	"	53	Nil	55
St. Mary's Hospital Mariannhill	Roman Catholic Church	Nil	Nil	63	Nil	63
St. Mary's Hospital kwaMagwaza Mission	Anglican Church Zululand	Nil	Nil	27	Nil	27
S.A.N.T.A. Dunstans Hibberdene	Tuberculosis Association Johannesburg	Nil	Nil	197	Nil	197
Toc H. Settlement Botha's Hill	Toc H. T.B. Settlement Committee, Durban	Nil	Nil	117	Nil	137
Umpumulo Mission Hospital, Mapumulo	Norwegian Mission Society & Local Hospital Board – Magistrate 2 E. and Hosp. Secretary and 2 N. Minister of Religion	Nil	Nil	45	Nil	45
Umlazi Mission Hospital	Anglican Church Natal	Nil	Nil	66	Nil	66

Although City cases are hospitalised in a large number of different hospitals, most of these are some distance outside of Durban and many provide limited facilities only. It is difficult to persuade the urban Bantu to accept hospitalisation far from his home. King George V Hospital is the only major institution with full facilities and the majority of Cases are in the first instance hospitalised there. The following information in regard to admissions and discharges at this hospital for 1961 has been kindly furnished by the Medical Superintendent whose co-operation at all times is gratefully acknowledged :

	E.	C.	A.	B.	TOTAL
Number of Admissions	357	124	299	2590	3370
Number of Discharges	377	139	287	2675	3478
Re-admissions	113	32	56	368	569
Irregular Discharges:					
Against Medical Advice	12	2	11	101	126
Absconded	6	7	7	194	214
Dismissed	3	7	2	56	68
Average stay in hospital	84 days	128 days	80 days	145 days	

During the year approval was received by the Natal Anti-Tuberculosis Association from the Department of Bantu Administration and Development for the establishment of a S.A.N.T.A. Settlement in the Umlazi area to the South of Durban and subsequently much of the preliminary work in this connection was carried out. It is hoped that building operations will commence in the ensuing year as the 240 beds which it is intended to establish will do much to alleviate the present shortage.

Admissions of City cases to the various hospitals during the year totalled 1484, comprising 150 Europeans, 64 Coloureds, 993 Bantu and 277 Asiatics. Unfortunately these figures cannot be compared with previous years as the system of recording admissions has been altered. For 1961 only direct admissions have been recorded, whereas previously the figures included admission to a hospital or settlement on transfer from another. Undoubtedly however many more cases were admitted in 1961 than in 1960.

Discharges of City cases were made up of 156 Europeans, 75 Coloureds, 953 Bantu and 259 Asiatics, a total of 1445. In addition 99 cases, comprising 5 Europeans, 4 Coloureds, 73 Bantu and 17 Asiatics, left hospital against medical advice. This is a marked improvement compared with the preceding two years when 196 and 143 patients respectively left against advice.

FIELD WORK AND CONTROL PROGRAMMES:

The staff of this Department engaged on field work consists of 5 European Health Visitors, 1 European Health Inspector, 15 Bantu and 5 Indian Health Assistants together with a clinical staff of 4 Europeans and 1 Bantu, all falling under the immediate control of the Assistant Medical Officer of Health. For most of the year however because of staff shortages and illness only 4 Health Visitors were available for tuberculosis work.

During the year a total of 39,151 visits and re-visits were made to new cases, suspect cases, cases discharged from hospital, cases receiving out-patient treatment and defaulters. These comprised 4,602 visits to Europeans, 2,094 to Coloureds, 24,297 to Bantu and 8,158 to Asiatics. Certain cases were given treatment in their homes by the Health Visitors and 2,407 streptomycin injections were administered. Contacts referred for X-Ray totalled 11,406 of which 70% actually attended, including 64% of the Bantu contacts. The yield of cases from these contacts was 1% of the Europeans, 5% of the Coloureds and Bantu and 2% of the Asiatics. Where necessary assistance was given to patients to obtain financial relief and arrangements made for hospitalisation and admission of certain to preventoria.

The problem of getting contacts, particularly Bantu, to be X-Rayed has always been a difficult one, and this has been due largely to ignorance and prejudice. However contact attendance improved during the year especially in the kwaMashu and Cato Manor areas. The Asiatics were much more co-operative in this regard.

The number of cases who defaulted in clinic attendance for treatment was again very high despite the improved clinic facilities. Here again the provision of clinics at kwaMashu and Cato Manor together with intensive follow-up work has brought about an improvement in these areas.

OUT-PATIENT SERVICES:

(i) Durban Chest Clinic:

A. Introduction:

This State Health Department Clinic which provides diagnostic and treatment facilities for pulmonary tuberculosis continues to serve not only Durban residents but patients from far beyond the City limits. As a result this clinic is always working at full capacity. Since the Corporation clinics have opened at Cato Manor and kwaMashu there has been a slight decrease in the attendances of City Bantu; and as the work of these peripheral clinics increases it is hoped that there will be a further reduction in the numbers of borough Bantu patients attending the Durban Chest Clinic.

Hereunder, is an extract of the Durban Chest Clinic's annual report for 1961 :-

> "The baby clinic instituted towards the end of 1960 has been in operation throughout this year. It rapidly grew to enormous proportions and control measures had to be adopted. The child health section of the City Health Department has assisted greatly here, and the use of the Heaf test as a diagnostic and eliminating procedure is now routine. These measures have curtailed the numbers but it is stell a very big clinic doing valuable work. The large increase in the number of B.C.G. inoculations given, is one of the results.
>
> The new working hours instituted in 1960 have been maintained and has resulted in the smooth running of the clinic.
>
> During this year the hours of attendance of the different races have been changed. Bantu still attend in the mornings, but the Indians only now from midday onwards. This has resulted in a "spreading" of the work more evenly throughout the day, with a reduction in the waiting time of the patients.
>
> Once again there has been a chronic shortage of available hospital beds throughout the year. Many patients have to be treated along out-patient lines who should be in hospital, and this aspect reflects on the incidence of tuberculosis in the community as a whole".

B. Diagnostic and Treatment Services:

	E.	C.	A.	B.	TOTAL
i. X-RAYS					
Borough: Clinical Interviews					
100 mm and large plates	2781	1369	9625	18701	
Initial 70 mm X-Rays	7194	1308	9334	11548	
Total	9975	2677	18959	30249	
Ex-Borough: Clinical Interviews,					
100 mm and large plates	470	101	1629	11572	
Initial 70 mm X-Rays	962	34	1307	5130	
Total	1432	135	2936	16702	
Total attendances	11407	2812	21895	46951	83065
ii. Notified Cases:					
Borough	53	16	217	819	
Ex-Borough	–	–	8	139	
Total	53	16	225	958	1252
iii. Tuberculin Tests	1570	168	2605	4809	9152
iv. Streptomycin injections	3673	2760	17055	47707	71195
v. Other injections	353	110	2281	4600	7344
vi. B.C.G. Inoculations	33	24	842	1091	1990

Comparing the above tables with those for 1960 shows that although the figures are very much the same as those for 1960, while there has been a continued increase (6%) of ex-borough Bantu patients attending the Durban Chest Clinic, there has actually been a decrease (7%) in attendances by City Bantu. The commencement of the Corporation pulmonary tuberculosis clinics at kwaMashu and Cato Manor no doubt are responsible for this.

C. Industrial Mass X-Ray and Other Surveys:

i. Industrial Mass X-Ray:

Europeans X-Rayed	6049
Non-Europeans X-Rayed	32635
Recalls for further investigation	1672
Total X-Rays taken	40356

These above figures cover visits to 110 factories. A further analysis of this table is not available.

ii. Mass B.C.G. Inoculation:

This was carried out among pupils of fifteen different schools and percutaneous B.C.G. was given to negative tuberculin reactors as well as to pupils not previously tuberculin tested, with good results. Conversion was over 95% 8 – 10 weeks later.

Total number children X-Rayed	6144
Total number children Heaf tested	4112
Total number inoculated with percutaneous B.C.G.	3340

(ii) ii Cato Manor and kwaMashu Clinics.

In February 1961 approval was received from the State Health Department for a proposal to purchase a mobile X-Ray unit and to establish peripheral clinics at Cato Manor and kwaMashu in existing buildings. Specifications were drawn up for the X-Ray equipment and vehicle with purpose built body, and tenders obtained. The buildings were renovated and a central dark room at the City Health Department was established and personnel engaged.

The clinic at Cato Manor was opened on 14th June, 1961, and since then has functioned on 3 days per week. The other clinic at kwaMashu was started on 4th July with two sessions per week. The staff which served these two clinics consisted of 1 Medical Officer, 1 European clinic sister, 2 Bantu nurses and 1 Bantu clerk. When the mobile X-Ray unit, which takes 100 mm films, was completed in October and started functioning on 25th October, 1961, the staff was supplemented by a European Driver - Operator. This unit was designed to provide diagnostic and control facilities for clinics established in fixed premises and not for mass X-Ray case finding purposes. Power is supplied at the clinic bases.

Although the clinics serve the Bantu townships in which they are situated many cases resident there continued to receive their treatment at the Durban Chest Clinic while working in the City, as a matter of convenience for the patient.

The following figures reflect on the work performed at both the clinics from the date of opening until the end of the year.

	Cato Manor	kwaMashu	Total
Total attendances	5709	4540	10249
Streptomycin injections	3657	2745	6402
Contacts seen	434	381	815
Suspects seen	324	344	668
Tuberculin tests	447	328	775
B.C.G. vaccinations	119	78	197
X-Rays taken	357	453	810

At Cato Manor 182 and at kwaMashu 192 cases of pulmonary tuberculosis were admitted to the clinics. The majority of these cases were known cases who presented themselves for for treatment voluntarily or were referred by the Durban Chest Clinic or by hospitals. The 815 contacts yielded 42 (5.1%) cases of pulmonary tuberculosis and the 668 suspects yielded 24 (3.6%) cases. Many more persons attended the clinic voluntarily but were disposed of after examination without being admitted for X-Ray.

Of the 374 cases, 109 were considered to be chronic pulmonary tubercle patients i.e patients who were unlikely to become stable because of the severity of the disease and who hac been on treatment for some considerable time. Of these 109 chronic cases 51 had positive sputa, some persistently, some intermittently. Forty cases were admitted to hospital.

All children up to 15 years of age were tuberculin tested using the Heaf multiple puncture apparatus. This latter test was preferred to the Mantoux in that readings could be made a week later instead of within 2 to 3 days. Thus defaulters who did not attend within the first few days could usually be traced and the reading done without having to re-test. The percentage of positive reactors in the different age groups was as follows :-

	kwaMashu	Cato Manor
0 – 4 years	50%	40%
5 – 9 years	66%	47%
10 – 14 years	81%	78%

The relatively high incidence of positives in the 0 – 4 years age group was probably due to the results of B.C.G. vaccination which was and still is administered to all new-born babies at the two major maternity hospitals in Durban. At Cato Manor where the percentage of positives was lower than at kwaMashu there were appreciable numbers of Asiatic cases included, and these were almost invariably Heaf negative in the younger age groups.

All Heaf negative reactors were vaccinated with B.C.G. vaccine using the intradermal method. It was noticed that conversion from negative to positive usually resulted in a mild conversion only and that the Heaf test rarely became moderately or strongly positive.

(iii) Chatsworth (Mhlatuzana) Clinic.

The Chatsworth area in which it is proposed to build the new Indian Housing Scheme, was incorporated within the City of Durban on 1st October, 1961. This area covers nearly 6000 acres and had a population of approximately 7500. The Local Health Commission's clinic which served the Public Health area of Umhlatuzana was situated within the perimeter of the newly incorporated area. Since it was uneconomical at that stage for the Department to establish a tuberculosis clinic within the area an agreement was reached with the Local Health Commission for City out-patient cases of pulmonary tuberculosis (and venereal diseases) to be treated at the Commission's Umhlatuzana Clinic. For the period 1st October to 31st December, 1961, a total of 842 attendances of pulmonary tuberculosis patients was recorded.

B.C.G. VACCINATION

In Durban B.C.G. vaccination was carried out at the Durban Chest Clinic and the Corporation clinics on tuberculin negative reactors, and amongst school children as part of a survey conducted by the Durban Chest Clinic, as detailed previously in this report. In addition all new-born babies at McCord Zulu Hospital and Kihg Edward VIII Hospital were vaccinated with B.C.G. At McCord Zulu Hospital 816 Bantu and 700 Asiatic babies were vaccinated during the year. At King Edward VIII Hospital approximately 1250 babies were vaccinated each month except for a period of approximately 3 months from August, 1961, when vaccination was suspended temporarily due to technical difficulties. Altogether a total of over 18,000 vaccinations with B.C.G. were carried out in Durban.

SUPPLEMENTARY FEEDING OF INDIGENT TUBERCULOSIS CASES:

The Department continued to operate the scheme during the year under review on the basis originally approved by the City Council and the State Health Service. The scales of rations issued weekly varied depending upon the race and age of the outpatient, and comprised tinned meat, tinned fish, dried fullcream milk, margarine, dried beans, and dholl (dried peas).

However, with effect from 1st April the ration scales were amended to conform to Department of Health Circular No.1 of 1961, and from that date the issue of dried beans and peas was discontinued in favour of a protein supplement, pre-fermented vitaminised maize supplement ("puzamandhla"), samp (or mealie rice) and jam. The quantities issued during the 12 months are set out below –

Protone	1,880½ lbs	Samp	2,834½ lbs.
Puzamandhla	2,245½ lbs	Mealie-rice	867½ lbs.
Meat	2,744 lbs	Jam	2,015½ lbs.
Fish	1,523½ lbs.	Beans	1,792 lbs.
Milk	2,367 lbs.	Peas	78 lbs.
Margarine	1,583 lbs.		

Rations were supplied to outpatients as follows :-

Age Group	Patient (Rations) Days			
	Coloured	Asiatic	Bantu	Total
0–4 years	17	60	16	93
5 – 8 years	30	27	207	264
9 – 12 years	–	37	146	183
Over 12 years	243	615	1175	2033
Total	290	739	1544	2573

As reported last year, the Council was desirous of increasing the number of outpatients on the ration strength, as the pilot scheme had demonstrated its value and shown that there were many persons who were unable to benefit due to financial limitations. The amount originally voted, R4,000 (£2,000), would only provide for approximately 45 outpatients, and it was considered that this annual amount could justifiably be increased to permit ration issues to some 200 persons. Further representations were made to the State Health Department in this regard but by the end of the year approval for increased expenditure had not yet been received.

DOMICILIARY ASSISTANCE:

In addition to assisting patients in obtaining government disability and maintenance grants when these are applicable, financial aid is given to patients of all races and their families by the Natal Anti-Tuberculosis Association and in the case of Indians by the Friends of the Sick Association. This Department's Health Visitors serve on the Care Committee of the Natal Anti-Tuberculosis Association and investigate the financial circumstances of cases requiring assistance. During the year financial aid to the amount of R14,827 was given to 816 families by this Association and 190 cases who had been certified as fit for work were placed in suitable employment by the Association's employment officer.

CONCLUSION:

Although the year has been marked by the establishment of two new Corporation clinics in the Bantu areas and other improvements in prevention and facilities for treatment of cases, the incidence of pulmonary tuberculosis particularly in the Bantu remains far too high Control work in this racial group was seriously hampered as it has been in the past by ignorance, superstition and prejudice, leading to default in clinic attendances, irregularity in following treatment schedules, failure of contacts to be X-Rayed and refusal of admission to hospital. Efforts were made to remedy this by health education and intensive follow up work with some measure of success but results on the whole have been disappointing.

VI VENEREAL DISEASES

Introduction

The incidence of venereal diseases in Durban and District is increasing in spite of the curative results obtained with modern drugs. There has been an increased number of cases of syphilis treated in the clinics in 1961, and this bears out the findings of the World Health Organisation, which shows a world wide increase in syphilis.

It must be appreciated that many Bantu do not realise the seriousness of venereal disease and its consequences, but with the assistance of intensive health education, they are gradually being enlightened on this subject, with resulting increases in the attendances at the clinics.

New Cases

The number of new cases treated at the clinics show an increase of 9% over the previous year. (1960 – 13,902; 1961 – 15,114).

Total Attendances

Here also there was an increase of 16% over the previous year (1960 – 46,331; 1961 – 53,580). It was interesting to see several patients, who were last treated at the clinics in 1957 and 1958 and cured, returning to the clinics for further treatment, having been re-infected, thus showing the confidence they had in the clinic and the treatment they received.

Ward Admissions

In July 1961, the venereal diseases wards were moved to Clairwood Hospital and only highly infectious cases are admitted for hospital treatment. 949 cases were admitted to the wards compared with 1,462 in the previous year.

Clinic Services

Addington:

302 sessions, comprising ten hours per week, were held for European and Coloured cases.

Congella:

Bantu and Asiatic patients were provided with daily clinic services (Saturday, Sunday and Public Holidays excepted) from 8 a.m. to 4.30 p.m. with a late session on Tuesdays until 6 p.m.

Cato Manor:

Two morning sessions per week were held, each session lasting 2½ – 3 hours.

kwaMashu:

One session lasting 4 hours per week is at present sufficient to cope with the number of patients attending this clinic. It must be appreciated that this clinic is mainly for females, as the males are working in Durban and attend the Congella Clinic. Out of the total attendance of 4,655, there were 3,803 female patients.

Contacts:

The tracing of contacts has improved in the past year, and it is hoped that a further improvement will be obtained next year.

Sideroom:

The following examinations were carried out in the sideroom at Congella Clinic:-

Smears	13,498
Urine Examinations	1,738

Laboratory:

The following numbers of blood examinations were carried out at the Government Laboratory, Currie Road:-

21,829	Wasserman Reaction Tests.
36	Complement Fixation Tests.

Ante-Natal:

1777 ante-natal cases were referred to the special clinic for routine serological tests. There were 430 positive cases and these patients were treated at the clinic.

STATISTICS

Non-European Cases of Venereal Diseases treated in 1961.

	New Cases		Total Attendances	
	Male	Female	Male	Female
1. Sero-negative Primary Sy.	74	1	277	12
2. Sero-positive Primary Sy.	306	72	1096	130
3. Secondary Sy.	80	253	174	560
4. Tertiary Sy. (Recognised clinically)	6	1	15	–
5. Latent (diagnosed on result of serological test done)	190	386	3262	3788
6. Neuro syphilis	–	–	2	1
7. Congenital Sy. (Under 1 year)	66	54	112	140
8. Congenital Sy. (Over 1 year)	39	29	36	68
Total Syphilis	761	796	4974	4699
9. Gonorrhoea	3363	2574	7357	2713
10. G.C. Vulvo-vaginitis	–	23	–	40
11. G.C. Ophthalmia	42	37	49	24
Total G.C. Infections	3405	2634	7406	2777
12. Ulcus Molle	1477	62	3159	61
13. Lymphogranuloma Venereum	360	7	760	20
14. Granuloma Inguinale	1	–	3	1
15. Venereal Warts	335	64	1490	61
16. Non-Specific Urethritis	970	2399	2445	4034
17. Non-Venereal	2134	1175	6227	2859
Total	5277	3707	14084	7036
Grand Total	9443	7137	26464	14512

Statistical Summary (All Races) treated in 1961.

	EUROPEAN				COLOURED				BANTU				ASIATIC				TOTAL
	City		Ex Ex-City		City		Ex-City		City		Ex-City		City		Ex-City		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
New Cases	316	52	326	7	298	99	66	1	5784	4759	1661	1106	565	168	69	17	15,114
Out-Patient Attendances	1186	234	805	18	1495	488	154	9	25062	12454	5884	3513	1650	370	202	56	53,580
Ward Admissions									197	431	-102	206	4	7			947

VII IMMUNISATION

Once again the Department has endeavoured to raise the state of immunity against the relevant infectious diseases to the highest possible level. In accomplishing this task the Department's activities were directed in three main drives :

(a) Immunisation at Child Health Clinics
(b) Immunisation at Schools
(c) Mobile Clinic sessions in thickly populated areas.

During the year under review all routine immunisation programmes were suspended during the poliomyelitis campaigns.

1. Immunisation at Child Health Clinics

Immunisation was carried out at practically all child health clinics. All mothers, whether they attended the clinic or not, were advised by letter when their children were due to commence the immunisation course.

On the whole there was a good response on the part of the parent to have the first injection, but difficulty was again experienced in making mothers realise the importance of bringing their children for the subsequent injections.

2. Immunisation at Schools

The school immunisation programme was maintained throughout the year. In all, 111 European, 23 Coloured, 57 Bantu and 174 Asiatic Government, Government-Aided and Private Schools enrolling pupils under 10 years of age, were visited, and all those children whose parents desired to have them protected, were immunised.

3. Mobile Clinic Sessions

(a) Smallpox Control

Mobile clinic vans visited various densely populated areas within the City at regular intervals in an endeavour to raise the vaccination state of the community. Most sessions were well attended. The numbers vaccinated are set out below :-

Europeans	2,643
Coloureds	1,203
Bantu	6,071
Asiatics	10,391
Total	20,308

(b) Diphtheria – Whooping Cough – Tetanus

It had been intended to initiate an intensified campaign against diphtheria. The demands on staff and time of the national poliomyelitis vaccination drive made this impracticable. Immunisation against diphtheria however continued at the same level as in the previous year. It is hoped to open this anti-diphtheria attack in 1962.

Set out below are details of injections given during 1961 at the Child Health Clinics, Schools and in the field

Diphtheria Injections

	E	C	B	A	Total
1st Injection	84	92	2,955	3,137	6,268
2nd Injection	67	81	1,291	2,565	4,004
Boosters	33	6	–	765	804
Totals	184	179	4,246	6,467	11,076

Diphtheria, Whooping Cough and Tetanus

1st Injection	2,504	956	3,954	4,438	11,852
2nd Injection	2,037	761	2,094	2,982	7,874
3rd Injection	1,508	606	1,241	2,055	5,410
Booster	114	5	2	18	139
Total	6,163	2,328	7,291	9,493	25,275

Diphtheria-Tetanus Injections

1st Injection	2,713	1,395	903	3,874	8,885
2nd Injection	2,236	1,365	1,371	3,197	8,169
3rd Injection	271	653	151	1,424	2,499
Booster	240	6	2	10	258
Total	5,460	3,419	2,427	8,505	19,811

(c) Typhoid Fever

No mass immunisation against the enteric fevers was carried out. Active immunisation was undertaken in respect of all handlers of milk and milk products, after Vi-testing, and in certain other specialised food trades.

Typhoid

1st Injection	61	3	917	98	1,079
2nd Injection	41	10	722	80	853
Booster	11	–	413	46	470
Total	113	13	2,052	224	2,402

Vi-testing – Food-handlers

Europeans	16
Coloureds	9
Bantu	907
Asiatic	113
Total	1,045

(d) Poliomyelitis

Immunisation against poliomyelitis with the Salk vaccine was carried out on three days a week at the Gale Street Clinic until May, when the nation-wide campaigns with oral live attenuated virus commenced.

The following injections were given–

Poliomyelitis					
1st Injection	361	29	20	494	904
2nd Injection	436	69	32	317	854
3rd Injection	1,080	89	14	207	1,390
4th Injection	271	3	1	3	278
Totals	2,148	190	67	1,021	3,426

National Campaign against Poliomyelitis

In March 1961 the Minister for Health announced that the Government proposed to institute a nation-wide immunisation campaign against poliomyelitis to coincide with the winter months when the prevalence of intestinal viruses is normally at a low level. the operation was to be undertaken in three phases, the dates for these being set at 15th - 27th May, 25th July - 5th August and 5th - 16th September. The Minister placed on all statutory local authorities the responsibility for administering the campaign in their respective areas.

The vaccine, made by the Poliomyelitis Research Foundation in Johannesburg, differed from that used in the preliminary campaign in 1960 in that it embraced all three of the main types of polio virus, having been prepared from highly attenuated strains developed by Sabin in the U.S.A. The vaccine, however, was issued in monovalent form for each type, and the mixing of the three types was to be undertaken by the administering authority using dilutions which would ensure at least 100,000 tissue culture doses per dose of vaccine.

The technique, apart from the mixing of the vaccine, was similar to that used in November 1960. In Durban, the vaccine suitably diluted from vacolitres of sterile saline, was administered on the special absorbent sweets issued by the State Health Department. For administration to infants the vaccine was mixed with a suitable syrup.

It was decided to organise the campaign into two main divisions – a schools division and a clinic division.

Through the Provincial Department of Education and the Department of Bantu Education permission was obtained to conduct sessions at every school in Durban. The clinic division was so organised that facilities for obtaihing the vaccine were made available to every citizen at a large number of convenient centres for all races over the ten day period of each phase.

The main problems encountered were the provision of sufficient personnel to complete the large number of teams required for the programme, and the difficulties involved in transporting diluted vaccine under refrigerated conditions to the various centres.

The first was overcome by the engagement of a number of temporary nursing personnel, and by the enlistment of the willing assistance of the three voluntary first aid associations, namely the South African Red Cross Society, the St. John Ambulance Brigade and Die Noodhulpliga. The second difficulty was overcome by the preparation of a large number of specially designed packs consisting of vaccine in insulated bags kept cool by "Scotch ice", the requisite number of sweets, plastic spoons, syrup, etc. Each team was issued with a full pack before proceeding to its centre. A roving team of medical officers visited each centre and in addition to supervising the work dealt with the numerous queries which invariably arose, and also carried spare equipment and vaccine.

It was decided to reduce the clerical work and the records kept to a minimum for statistical purposes, and this rendered the administration of the campaign considerably easier and speedier than previously.

The campaign was preceded by a massive publicity build-up through the medium of the press and the radio in addition to advertisements in the local papers and at local cinemas. The Non-European sections of the population were intensively canvassed in all areas by teams of health educators, and this in no small way contributed to the success of the campaign.

After the difficult and detailed preliminary organisation the campaigns themselves proceeded smoothly and successfully. Set out below are details of the numbers of persons who received the vaccine:-

Date		E	C	A	B	Total
Round I	: May	66,111	11,946	90,978	20,871	189,906
Round II	: July	66,268	12,290	97,992	31,220	207,770
Round III	: September	68,902	13,944	101,655	34,817	219,318
1st Monthly	: November	1,016	167	807	1,217	3,207
2nd Monthly	: December	1,085	85	456	612	2,238
Total		203,382	38,432	291,888	88,737	622, 439

The above results represent a high percentage of the target aimed at, which included all European, Coloured and Asiatic persons between the ages of 3 months and 29 years, all Bantu persons between the ages of 3 months and 9 years, all recent immigrants from Western Europe and North America regardless of age, and all pregnant women. It may be mentioned here that the limitation of the upper age group in the case of the Bantu section to 9 years was based on research findings which indicated that this section of the community, living as it does in rather more primitive surroundings than the others, had at a considerably early age acquired antibodies against the polio virus in all three types.

Concurrently with the vaccination campaign it was decided to keep observations on the amounts of wild virus and attenuated virus in the City's sewerage system. Weekly samples of sewage from twelve points in different parts of the City were submitted to the Poliomyelitis Research Foundation for culture. No results had been received by the end of the year.

Follow-up Programme

Having successfully conducted these mass campaigns it was obvious that it would be essential to continue the policy of artificial immunisation because of the probable disappearance of wild polio virus and the danger that new generations would consequently not be protected by the natural acquisition of immunity through repeated minimal infections. Accordingly the Department in October instituted the first of the monthly "polio days" which will now become a permanent feature. In these monthly sessions vaccine is administered at a large number of centres throughout the City and every effort is made to attract infants who have attained the age of 3 months, and also those persons who for some reason missed one or more of the three doses during the national campaign.

It is perhaps too early to draw any scientific conclusions from the campaign other than that an exceptionally high administration rate was achieved. It is worth recording, however, that no known case of polio has occurred in Durban since the beginning of September 1961.

VIII HEALTH INSPECTION

STAFF:

Despite the appointment of two Health Inspectors during the year, the inspectional staff continued to operate under full strength; however, the indications are that all vacancies will be filled in the forthcoming year. The unqualified staff establishment for anti-rodent and anti-mosquito work was augmented during the year enabling the Field Hygiene Section to fulfill its programmes more effectively.

INSPECTIONS:

During the year 121,177 inspections were carried out, and of these 32,291 related to food-handling premises, 27,673 to other trading premises and 61,213 to non-trading premises. Inspections relating to Infectious Diseases, Dairies, Housing, Plans, etc. are not included in these figures.

Arising from these inspections 7,047 personal noticese were issued, 3,309 written notices were served and 1,261 letters written.

Reports on 2,480 applications for trading licences were also furnished to the appropriate authorities.

COMPLAINTS:

The number of complaints received and dealt with amounted to 3,655 and comprised the following :-

Animal Keeping	8
Bugs	87
Cockroaches	11
Conservancy Services	1
Drainage Appurtenances	36
Defective Drainage (storm and waste water)	291
Fleas	19
Flies	296
Food Hygiene	18
Food (unsound)	16
Housing (illegal)	29
Housing (overcrowding)	28
Lack of Sanitary Accommodation	34
Miscellaneous (Unclassified)	51
Mosquitoes	746
Offensive Smells	176
Poultry	87
Refuse Dumping	61
Refuse Removal Services	13
Rodents	277
Shacks	1
Smoke/Air Pollution	8
Structural Defects	137
Unclean Conditions	342
Vacant Land (overgrown, misuse, etc)	779
Ventilation and/or lighting	3
Total	3,655

Arising from these inspections 7,047 personal notices were issued, 3,309 written notices were served and 1,261 letters written.

FOODSTUFFS AND FOODHANDLING:

(a) City Markets:

Inspections of all perishable foodstuffs arriving at the City Market were carried out every day the market was operating.

Items condemned and destroyed were as follows:-

FOODSTUFFS CONDEMNED DURING 1961

Quantity	Commodity	Quantity	Commodity
34 Trays	Apricots	147 Sugar Pockets	Green Beans
6 Sugar Pockets	Bringals	1,220 Pockets	Green Beans
3 Pockets	Bringals	12 Trays	Green Beans
13 Pockets	Butter Beans	1 Small Carton	Green Mealies
2 Bags	Cabbages	4 Pockets	Green Peas
12 Sugar Pockets	Cabbages	1	Guinea Fowl
1 Bag	Carrots	27 Pockets	Lemons
70 Sugar Pockets	Carrots	4 Trays	Lettuce
67 Pockets	Carrots	18 Crates	Lettuce
2 Trays	Capsicums	50 Trays	Mangoes
1 Bag	Chillies	2 Half Lugs	Plums
6 Pockets	Chillies	54 Sugar Pockets	Potatoes
1 Sugar Pocket	Chillies	401 Pockets	Potatoes
6 Pockets	Cucumbers	2 Bags	Pumpkins
20	Dressed Ducks	1 Carton	Rhubarb
203	Dressed Fowls	3 Trays	Rhubarb
4	Dressed Turkeys	5 Sugar Pockets	Sweet Potatoes
7 Packets	Giblets	2 Bags	Sweet Potatoes
1 Box	Grapes	15 Boxes	Tomatoes
15 Pockets	Grape Fruit	287 Trays	Tomatoes

(b) Unsound Foodstuffs:

Some 22,000 tins of food (stringless green beans and grapefruit segments), the product of a factory situated outside the City, were located in a warehouse. Bacteriological examination demonstrated pathogenic organisms, including coagulase-positive staphylococci. Stocks of these tinned foodstuffs were condemned and destroyed.

A complaint was received from a housewife of having purchased liver showing signs of parasitic disease. The liver was bought from a departmental store conducting a retail butchery section. The complaint was found to be justified and the matter was taken up with the parties concerned. The seller was suitably warned. This is the first complaint received since the pre-cut and pre-packed meat sales were introduced early in 1959

Complaints brought to light the hawking of "farmbutter". Two members of the public submitted their purchases to this Department. On examination the "butter" appeared to be margarine with a suggestion of added colouring matter. The complainants were unable to give any information that could enable this Department to identify or apprehend the hawkers.

A complaint in respect of an imported brand of canned oysters as being the possible cause of a case of food-poisoning was investigated. Bacteriological tests of the oysters was carried out, but no pathogenic organisms could be demonstrated.

On numerous occasions food-handling merchants contacted this Department with a view to examining foodstuffs held by them. Where warranted on public health grounds the stocks were surrendered by them, condemned and destroyed. This practice is one of routine, and certificates of condemnation are issued.

(c) Offal Hawkers:

Arising from complaints of Bantu women selling offal in Dalton Road and vicinity, the City Police and the Flying Squad of the South African Police sought the co-operation of this Department and a meeting was held to plan a campaign of joint action.

Subsequently a raid was organised on Bantu females selling meat and offal in the Dalton Road area. The Plain Clothes Section of the City Police, the Flying Squad of the South African Police and members of this Department took part. Eight women were arrested and summarily charged. They were each sentenced to a fine of R2.00 or 5 days imprisonment. It is noted that although illegal trading and obstruction were also involved, only charges under the Food By-laws were laid.

Further complaints on the same subject have been lodged by licensed non-European butchers and permit-holding offal dealers in respect of the same area. These complaints are justified and the matter has again been referred to the City Licensing Officer, City Police and the South African Police.

(d) Weevil Infestation - Mobeni Area:

Several factories in the Leicester Road area were found to be infested with weevils and it was found that the weevils were emanating from a warehouse holding old stocks of maize belonging to the State. The nuisance was abated after some two weeks by the progressive removal of the maize and by the owners of the warehouse themselves carrying out spraying with insecticides.

(e) Conveyance of Meat:

For many years this Department has been perturbed by the most outmoded and unhygienic practice prevalent in regard to the bulk transportation of meat carcases within the City. The current practice of conveying carcases in open lorries with the meat covered, at times, with canvas coverings, not only exposes the meat to contamination from flies, dust and extraneous matter, but often results in carcases falling upon the streets and in the gutters particularly when the vehicle is driven by an over zealous individual. Unloading at the kerbsides with all the carcases fully exposed is performed in a no more hygienic manner. Unfortunately these practices are performed in the full light of day and not only are the local consumers inflicted with the sight of these unclean procedures but visitors, both national and overseas, gain the impression that in this matter Durban can be regarded as one of the most underdeveloped in the civilised world.

During the year a concerted effort was made by this Department to improve upon these revoltingly unhygienic practices. The fate of the attempts to improve matters are described in the Chapter on Legislation in this report.

(f) Mineral Water Factory Water Supply:

Following upon the receipt of an unsatisfactory bacteriological report on the bore-hole water supply to a local mineral water factory, the use of this supply was immediately stopped. The source of contamination was traced to a defective sleeve-lining in the bore-hole. This has now been rectified and further samples have revealed a high standard of purity.

(g) Beach Caterers:

Toward the close of the year with the approach of the summer holiday season a particularly concentrated inspectional programme was instituted along the Beach Front.

Discussions with the Beach Caterers Association proved fruitful and considerable improvement was effected in regard to all this Department's requirements, with special emphasis on clean clothing, unchipped crockery, adequate protection and covering of foodstuffs served off-premises, and scullery and kitchen cleanliness. Week-end and night inspections were instituted and it is pleasing to record that no complaints were received throughout the season.

However, certain of the premises were found to be grossly congested, the businesses having outgrown the original capacity of the premises. This poses a major problem as the businesses cannot reduce this trade and service to the public, whilst land for expansion of any individual premises is at a premium. Pending solution of this problem all the caterers have been warned not to extend the scope of this trade without prior consultation with this Department.

(h) Race Course Catering:

As in past years the Department paid special attention to all phases of catering and sanitary arrangements at the major race meetings. Food-handling inspections were carried out before and during performances. At some meetings the casual staff employed on catering numbered 500 persons and through the co-operation of the Clubs concerned conditions, on the whole, were maintained at a very satisfactory level.

No complaints were received from the public and no cases of food poisoning were received.

FOOD, DRUGS AND DISINFECTANTS ACT:

Under the food-sampling programme 614 samples of food failing within the scope of the Regulations framed under the above Act were purchased and submitted to chemical analysis. These comprised:

Commodity	No.	Result
Boerewors	11	All satisfactory
Cream	44	" "
Dairy Mix (Soft)	2	" "
Dripping	5	" "
Fruit, Dried (Dates, etc.)	3	" "
Fruit Syrup (synthetic)	4	" "
Honey	13	4 prosecutions Fines R40.00
Ice Cream	66	All satisfactory
Milk	256	1 prosecution Fine R10.00
Milk Shake	2	All satisfactory
Minced Meat	99	8 prosecutions Fines R150.00
Oil, cooking	11	All satisfactory
Polony	6	" "
Sausages	87	6 prosecutions Fines R90.00
Tomato, dehydrated	5	All satisfactory
	614	Total Fines R290.00
		Total Prosecutions 19

HOBBIES FAIR AND TRADE EXHIBITION

During July an Exhibition (hobbies, trade, arts and crafts, etc.) was held in the Woolbrokers' Federation premises in Congella Road. The exhibition lasted from the 5th to the 15th of the month and the attendance during this period was approximately 100,000 persons. Suitable water-borne sanitary accommodation for patrons was arranged and a daily refuse removal service was maintained. Restaurant and bar facilities were available to the public. Standard scullery arrangements were provided in the bar but, in the case of the restaurant where no scullery facilities were available, dispensable plates, cups, etc., were used. All Foodstuffs were prepared at approved premises away from the exhibition.

Various exhibitors conducted food demonstrations which involved, in the main, the distribution of food samples, or the usefulness of a particular cooking utensil. Only one complaint was received during the exhibition and this referred to one food demonstration. The matter was immediately dealt with and rectified.

WATER SAMPLING

The procedure of taking water samples for chemical and bacteriological tests was revised during the year. Under the old system samples were taken by the staff of the City Engineer's Department from a series of "fixed points" each week. Samples are now taken by a Health Inspector of this Department and are drawn from widely scattered points covering the whole of the City.

The old way of sampling disclosed, more or less, the purity of water entering the reticulation system whereas the method now used indicates the quality of water emerging from the far ends of the reticulation system. If any defects occur in secondary mains, they can now be more easily detected.

SEWAGE SAMPLING (POLIOMYELITIS IMMUNISATION)

Each week samples of sewage were taken from 12 points throughout the City and submitted to the State Health Department. Sampling commenced well before the immunisation campaign and was still in hand at the close of the year. Research work on these samples is expected to give an indication of the value of the immunisation procedures in the different areas. No results are available as yet, but it is hoped that in due course the findings will be made available and be of epidemiological value.

DUMPING OF REFUSE

Certain residents of the northern suburbs caused extreme annoyance to their fellow suburbanites by allowing, or instructing their domestic servants to dispose of garden and other refuse on any vacant land they were able to find providing the land was reasonably distant from their own respective houses. Usually the land selected for dumping is Council-owned. At some points "No Dumping" notices erected at the request of this Department were removed by persons unknown. Dumpers appeared to be more active at week-ends. The matter received attention but is not easy of solution.

DRIVE-IN THEATRE

Following upon a complaint of inadequate sanitary accommodation at a drive-in theatre the matter was taken up with the management concerned and also with the City Engineer. The Management provided additional accommodation and conditions, particularly at interval time, are much improved.

OLD AIRPORT: STAMFORD HILL:

For a long time nuisances existed at this point due to certain premises being misused by vagrants. This matter, of long concern to this Department, has now fallen away as the buildings, excepting one cottage, have been demolished. The cottage is under the control of a Bantu caretaker.

NON-EUROPEAN BEACHES:

Press prominence was given to the large crowds of pleasure seekers on the beaches on Easter Monday, and it was estimated that 50,000 of these people were non-Europeans.

A survey of general conditions after the holidays showed that the beaches between the Snake Park and the Country Club -areas used largely by Indians, Coloured and Bantu - were heavily strewn with litter and refuse of all descriptions. Scavenging operations, however, were in hand during the survey.

Many parts of the Snell Parade bush were grossly fouled with excremental matter in addition to all types of refuse. Subsequent inspection showed it to be still the subject of misuse on a large scale.

It was apparent that facilities provided for persons in this area were quite inadequate. In addition there was only one point where these people could obtain refreshments and this facility was not in compliance with the Food By-Laws. It was obvious that there was an urgent necessity to provide better amenities for users of these beaches.

Plans for major improvements, in light of the above, are now being formulated for consideration by the City Council

DUST NUISANCE – MUNICIPAL ASPHALT PLANT – CONGELLA ROAD:

A complaint of dust nuisance alleged to be caused by the asphalt plant was investigated. Three composite dust samples were collected from the premises adjoining the plant (King Edward VIII Hospital), together with a sample of dust from the plant itself. These samples were submitted to chemical analysis. In addition, three selected areas in complainant premises were thoroughly cleansed and examined daily for a period of three weeks for the purpose of assessing the "build up" of dust. There was insufficient build up of dust to collect for analysis.

The report of the Analyst disclosed the presence of much carbon and sulphates in the samples from the premises concerned. Analysis of the sample from the plant itself did not show these substances.

These results suggest that the major portions of the dust were composed of coal ash, thus largely exonerating the Asphalt Plant. At this stage it cannot be stated with certainty from whence this dust emanates, though probably railway locomotives and/or a Power Station can be implicated-

SEEPAGES: HILLARY/BELLAIR AREAS:

Complaints of defective drainage and seepage of waste water are still lodged with this Department. In all cases the urgency of providing a sewerage system is indicated. The non-absorbent nature of soil and the increase in the number of soakage pits from new housing are directly responsible for the increase in this nuisance.

FLIES:

Several instances of fly nuisance are listed below:

(a) A complaint of flies was received from one area. On investigation, the cause was found to arise in a dwelling and outbuildings which were being misused by vagrants.

(b) At one period there was a marked increase in fly complaints in the Maydon Wharf Area. Extensive development was found taking place in raw manure removed by the Railways authorities from the rail siding at the Abattoir. This manure was deposited in a storage area in the vicinity of the Railway compound. The matter was taken up with the System Manager and conditions remedied.

(c) Another source of fly breeding was the depositing of residue, in considerable quantities, from illegal brewing operations in storm water drainage inlets, on unmade road verges and on vacant land. This practice allows of no easy solution as long as the incentive for brewing remains. After clearance of residue further deposits are made - always surreptiously.

(d) A spate of complaints from the residential area of Montclair was traced to hawking, by a farm truck driver, of fly blown poultry manure. The offender was located and warned to refrain from introducing such material into the City.

"HORN" FLIES:

Complaints from the Bluff area in connection with the prevalence of a type of blood sucking fly which attacked canines were investigated. The fly, a species of Stomoxys, is difficult to eradicate as it has habits that make it difficult to locate the breed-places, whilst the adult cannot be dealt with by means of poison-bait. Nevertheless every effort was made to find and treat likely breeding places and, on the advice of the State Veterinary Department, certain fly repellants were recommended to dog owners in badly infested areas.

SANITARY CONDITIONS IN THE CATO MANOR EMERGENCY CAMP:

ANIMAL KEEPING:

There has been a very noticeable decrease in the number of pigs in the area. The position in regard to cattle and goats remains unchanged.

SEWER BLOCKAGES:

Towards the end of the year there were fewer sewer blockages. Those that did occur were promptly dealt with by the Department of Bantu Administration. Consequently this health hazard has been considerably reduced.

ILLEGAL TRADING:

This activity continues to flourish and roadside traders dealing in offal, meat, fruit and vegetables can be found on all the main roads in the Camp area. In addition a number of general dealer businesses are being conducted in shack structures. The latter traders are gradually being eliminated with the demolition and removal of shacks from the Camp.

REFUSE REMOVAL:

This aspect of the Camp has undergone a marked improvement. Since the refuse removal service was re-organised the road-verges and surrounding areas have been maintained in a clean and tidy condition. Refuse collection sites have been levelled and a form of drainage provided therefrom. In addition adequate refuse bins have been provided.

UMLAZI GLEBE:

During the year this Bantu village ceased to be classified as an Emergency Camp. Sanitary conditions here are deteriorating and the provision of water-borne sewerage cannot be long delayed.

MOSQUITOES:

Typical examples of nuisance from mosquitoes breeding under domestic conditions are recorded under :-

(a) Mosquito breeding occurred on the Esplanade and was located in the foundations of a State building under construction. As building workers were in recess, the matter was referred to the State Health Department, which Department, in turn, requested that this Department carry out the work as they did not have material and plant readily available. The nuisance was promptly eliminated.

(b) A major mosquito nuisance arose in the suburbs known as Rose Glen and Marino Heights. The solution of this problem was mainly within the scope of the Field Hygiene Section. However, the situation was aggravated by domestic breeding. A survey was carried out and all local breeding dealt with on the spot. On three nights, inspections for index purposes disclosed that the nuisance had been abated.

NATIVE HERBALISTS : STRATFORD ROAD:

The occupation of illegal structures in Stratford Road by numerous Bantu herbalists had been a source of nuisance due to rodent harbourage and offensive smells. However, after pressure was brought to bear on the owners, it is pleasing to record that the structures have now been demolished.

CHATSWORTH:

Toward the close of the year the area known as Chatsworth which includes three established townships was incorporated into the City of Durban. Development of a major housing scheme for for Asiatics has already commenced. The three established townships are Umhlatuzana, Kharwastan and Silver Glen. Initial routine health inspections commenced in November. Where piped water is available and the soil is suitable, septic tanks have been insisted on by the previous authority; otherwise, local pail or pit latrines are in use. A refuse removal service is not available at present.

KWAMASHU:

By the end of the year the population had increased to approximately 56,000. The following points are recorded for general interest:

(a) The swimming bath was opened early in the year and proved very popular;

(b)

(b) Three new creches, all in new premises connected to the sewerage system, came into use during the year.

(c) In an effort to curb sugar cane fires and thefts, the Natal Estates commenced fencing their property on the western perimeter of the Township.

(d) Though additional trading premises were built illegal trading still gave some trouble during the year.

(e) General sanitation remained at a satisfactory level.

(f) Refuse removal services were improved.

(g) A start has been made on fencing in the sewage disposal works site.

(h) The City Engineer has filled in all disused drains running parallel with the main canal and storm water drainage/channelling has commenced in Unit D.

IX FIELD HYGIENE

Pest Control

Pest control is vested in a Field Hygiene Section, the primary functions of which are the destruction and control of mosquitoes, rodents, bugs, cockroaches and other pests, and the clearance of overgrown land.

The Section operates under the direction of a Senior Health Inspector and the staff comprises a Supervisor, 2 General Assistants together with 100 non-European labourers.

Rodents:

The controlling of rodents is undertaken by 7 General Assistants under a Senior Assistant, although all work is carried out in close co-operation with District Health Inspectors.

Due to an increase in personnel anti-rodent activities have been extended to outlying domestic and industrial areas. Numerous poison points were established and maintained to provide a good index of rodent activity. From the results obtained Departmental action was planned.

Although poisoning with a variety of rodenticides has been adopted as the primary means of rodent destruction with great success, gassing with cyanogasis still resorted to, more especially in the outlying Bantu areas, where rodents tend to colonise in burrows.

The inspection of premises during construction to ensure rodent-proofing has proved most effective and the results of inspections commenced in 1959, are now being appreciated. Bearing in mind the close proximity of Durban to Eastern Ports, close liaison is maintained with the Port Health Authorities and all data relative to rodent control is interchanged.

The testing of various materials against rodent ingress has now become a regular feature and it has been observed that rodents have found very little difficulty in penetrating the samples of tempered hardboard and gypsum plaster submitted, but no penetration has been effected through asbestos and similar materials.

Bugs:

The resistance of bed bugs to certain insecticides resulted in heavy bug infestation in Bantu hostels. An investigation undertaken by the Organisation and Methods Officer together with members of this Department, led to the formation of a "Bug" Unit, under the control of the City Health Department. The unit comprises 1 European supervisor and 4 Bantu labourers. The costs of this unit are met by the Department of Bantu Administration and the charges are allocated to the respective institutions. It has been found that, using the right insecticide three annual treatments are sufficient.

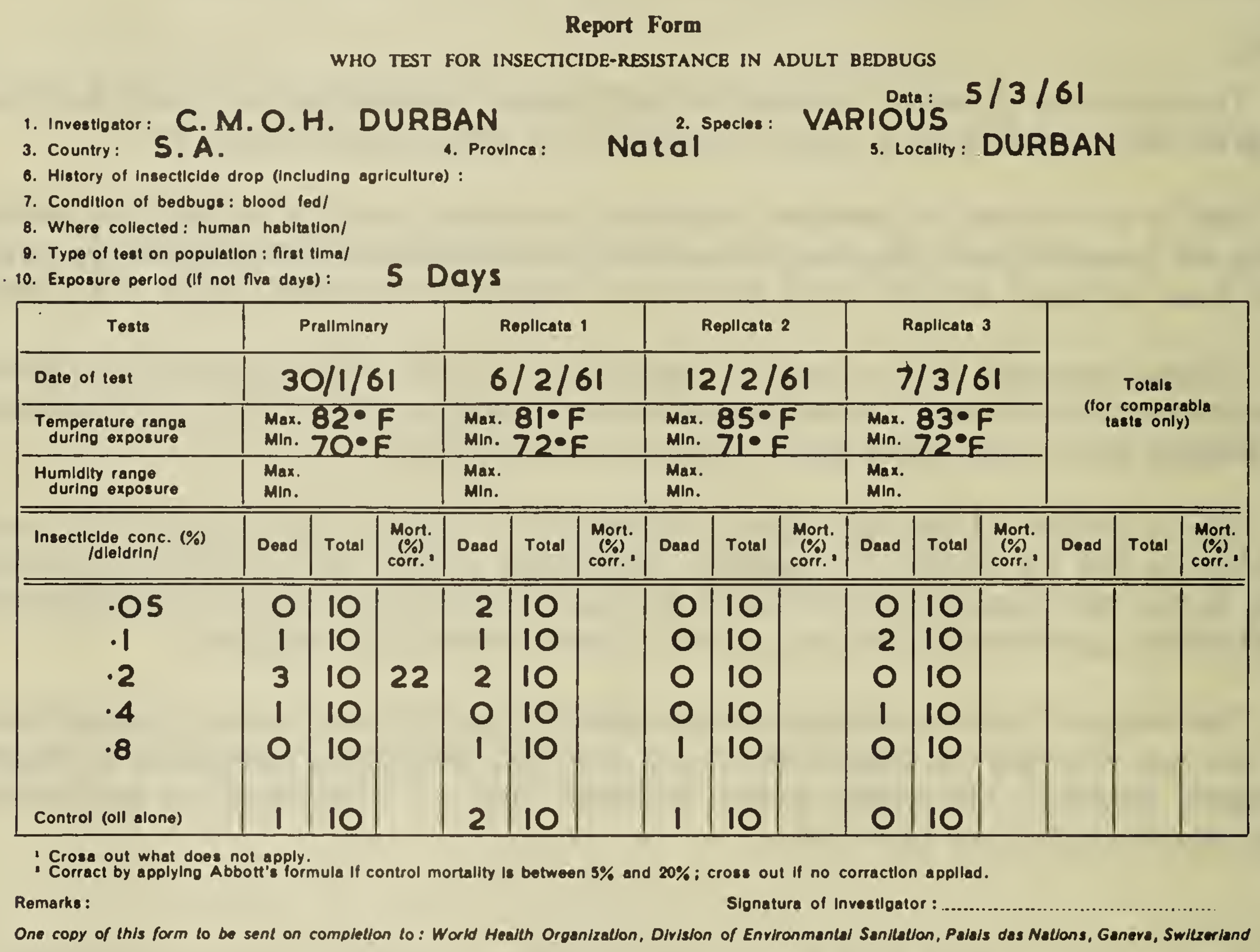
The following table indicates the relative costs of this work by my Department and the Department of Bantu Administration:

Department	Bantu Labour		European Supervision		Cost Material P.A.	Cost Transport P.A.	Total Cost P.A.
	No.	Cost	No.	Cost PA			
Department of Bantu Administration	15	R5400	–	–	R4800	– –	R10200
City Health Department	4	R1440	1	R1900	R1800	R600	R5740
					Net Saving		R4460

More important than the saving reflected above is the fact that these institutions are now, after a considerable period, bug free.

The inhabitants of the above hostels total approximately 12,300 persons resulting in a cost of 15 cents per bed for every treatment or 45 cents per bed per annum.

The following report form submitted to the World Health Organisation clearly revealed that a strain of bugs resistant to Dieldrin was now existent in the City. This conclusion was later confirmed by the World Health Organisation. Spraying with emulsifiable organo-phosphate at a concentration of 3% has so far been effective.



Report Form

WHO TEST FOR INSECTICIDE-RESISTANCE IN ADULT BEDBUGS

Date: 5/3/61

1. Investigator: C.M.O.H. DURBAN
2. Species: VARIOUS
3. Country: S.A.
4. Province: Natal
5. Locality: DURBAN
6. History of insecticide drop (including agriculture) :
7. Condition of bedbugs: blood fed/
8. Where collected: human habitation/
9. Type of test on population: first time/
10. Exposure period (if not five days): 5 Days

Tests	Preliminary			Replicate 1			Replicate 2			Replicate 3			Totals (for comparable tests only)		
Date of test	30/1/61			6/2/61			12/2/61			7/3/61					
Temperature range during exposure	Max. 82° F Min. 70°F			Max. 81° F Min. 72°F			Max. 85° F Min. 71° F			Max. 83° F Min. 72°F					
Humidity range during exposure	Max. Min.			Max. Min.			Max. Min.			Max. Min.					
Insecticide conc. (%) /dieldrin/	Dead	Total	Mort. (%) corr. [2]	Dead	Total	Mort. (%) corr. [2]	Dead	Total	Mort. (%) corr. [2]	Dead	Total	Mort. (%) corr. [2]	Dead	Total	Mort. (%) corr. [2]
·05	0	10		2	10		0	10		0	10				
·1	1	10		1	10		0	10		2	10				
·2	3	10	22	2	10		0	10		0	10				
·4	1	10		0	10		0	10		1	10				
·8	0	10		1	10		1	10		0	10				
Control (oil alone)	1	10		2	10		1	10		0	10				

[1] Cross out what does not apply.
[2] Correct by applying Abbott's formula if control mortality is between 5% and 20%; cross out if no correction applied.

Remarks:

Signature of investigator: ....

One copy of this form to be sent on completion to: World Health Organization, Division of Environmental Sanitation, Palais des Nations, Geneva, Switzerland

Vacant Land

Perusal of the accompanying statistical table will reveal that the clearance of overgrown plots of land, still plays a big part in Departmental activities, some 450 acres being cleared as against 371 in 1960 and 225 acres in 1959.

The clearance of these plots results from complaints with public health implication usually arising from fouling, dumping of refuse, tins, etc. Clearance by the Department is undertaken at a very low tariff as a service to the public

Cockroaches

The routine spraying of manholes and catchpits was maintained during the year with satisfactory results. From observations it is becoming increasingly evident that a strain of roaches has developed which is resistant to certain chlorinated hydrocarbon preparations. This is more noticeable in the species Blattella germanica.

Organo-phosphate insecticides are still proving effective but the residual action is not as long-lasting with chlorine compounds. However, no resistance has yet been noted.

Flies

The removal of slum dwellings from Cato Manor has greatly reduced fly incidence in that area and fly baiting, although practised, has been considerably curtailed.

Fly nuisances have regularly occurred in the City arising from the practice of hawking fly blown manure. Unfortunately no legislation exists whereby action can be taken against the hawker and the unsuspecting householder is faced not only with a prevalence of flies but possible prosecution.

July Industrial Exhibition

A small stall was allocated at the above Exhibition for the purpose of illustrating Departmental activities. Due to the limited space available it was unfortunately only possible to exhibit pest control measures. These included live exhibits of flies (in all stages of development), bugs, mosquitoes and live rodents. Special emphasis was placed on the correct usuage of modern residual type insecticides.

In view of the remarkable interest shown by the public in these exhibits, it is considered that the fullest advantage must be taken at future exhibitions to educate the public on matters of public health concern.

Mosquitoes

The field work of controlling mosquitoes is carried out by 6 separate units, each comprising 1 European General Assistant and ± 15 Bantu labourers with individual transport, operating in they respective areas.

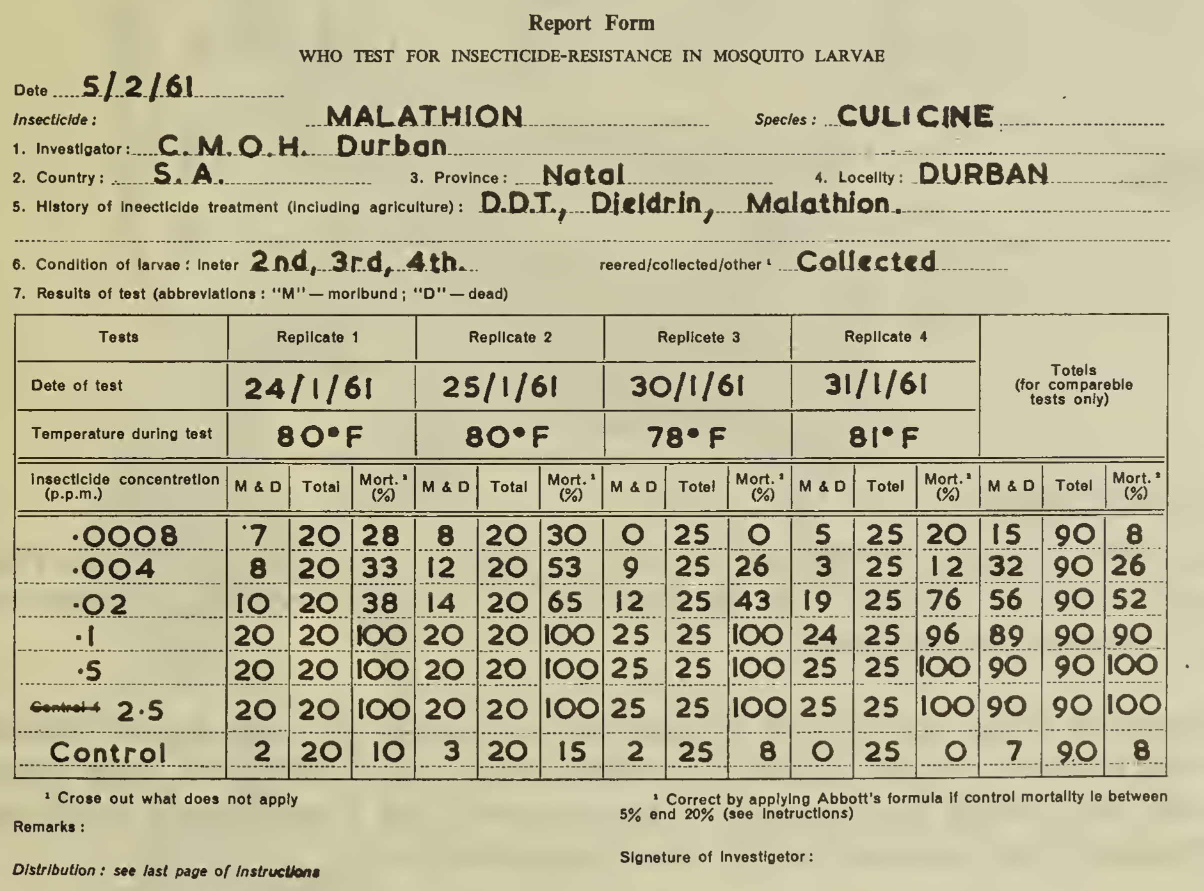
Bayhead

This area falls under the control of the South African Railways. As a result of reclamation and lack of adequate drainage, large accumulations of stagnant water have arisen.

It is from these swamps that periodic mosquito nuisances occur to residents overlooking the area despite the measures being adopted by South African Railways health personnel. Efforts to reclaim have proved beneficial but as this Department has repeatedly stated, "until such time as reclamation is linked with drainage, it is inevitable that sporadic mosquito nuisances will occur at regular intervals".

Insecticide Resistance

Doubt arose during the year as to whether mosquito larvae were developing a strain resistant to the insecticides in general use, but tests carried out with kits obtained from the World Health Organisation, proved this suspicion to be unfounded.



Report Form

WHO TEST FOR INSECTICIDE-RESISTANCE IN MOSQUITO LARVAE

Date 5/2/61

Insecticide: MALATHION *Species:* CULICINE

1. Investigator: C.M.O.H. Durban

2. Country: S.A. 3. Province: Natal 4. Locality: DURBAN

5. History of insecticide treatment (including agriculture): D.D.T., Dieldrin, Malathion.

6. Condition of larvae: Instar 2nd, 3rd, 4th. reared/collected/other[1] Collected

7. Results of test (abbreviations: "M" — moribund; "D" — dead)

Tests	Replicate 1			Replicate 2			Replicate 3			Replicate 4			Totals (for comparable tests only)		
Date of test	24/1/61			25/1/61			30/1/61			31/1/61					
Temperature during test	80°F			80°F			78°F			81°F					
Insecticide concentration (p.p.m.)	M & D	Total	Mort.[2] (%)	M & D	Total	Mort.[2] (%)	M & D	Total	Mort.[2] (%)	M & D	Total	Mort.[2] (%)	M & D	Total	Mort.[2] (%)
·0008	7	20	28	8	20	30	0	25	0	5	25	20	15	90	8
·004	8	20	33	12	20	53	9	25	26	3	25	12	32	90	26
·02	10	20	38	14	20	65	12	25	43	19	25	76	56	90	52
·1	20	20	100	20	20	100	25	25	100	24	25	96	89	90	90
·5	20	20	100	20	20	100	25	25	100	25	25	100	90	90	100
~~Control[1]~~ 2·5	20	20	100	20	20	100	25	25	100	25	25	100	90	90	100
Control	2	20	10	3	20	15	2	25	8	0	25	0	7	90	8

[1] Cross out what does not apply

[2] Correct by applying Abbott's formula if control mortality is between 5% and 20% (see instructions)

Remarks:

Signature of Investigator:

Distribution: see last page of instructions

Similar tests, however, conducted in waters from certain swamps proved conclusively that it was the water composition which was affecting the insecticides; these findings were confirmed on submission to the World Health Organisation. In these waters high spreading malarial oil proved fairly effective, but as a general spray, organo-phosphate emulsifiable liquid applied as a 3% solution gave excellent results.

MOSQUITOES

Yards of Ditching		Oil	Used	Other Insecticide	
1960	1961	1960	1961	1960	1961
286,552	–	1,025 gals.	1,489 gals.	397½ gals.	460 gals.

RODENTS

Rodents Destroyed		Rodents sent Plague Index		Poison used	
1960	1961	1960	1961	1960	1961
–	2,052	100	117	369 lbs. 1,491 gms. (liquid)	800 lbs. 1,967 gms. (liquid)

FLIES

Insecticide Used		Poison Used	
1960	1961	1960	1961
244 gals.	5 gals.	1,497 lbs.	1,434 lbs.

COCKROACHES

Insecticide Used		Poison Used	
1960	1961	1960	1961
39 gals.	70 gals.	17,606	36,356

BUGS

Insecticide Used		Rooms Treated	
1960	1961	1960	1961
10 gals. 5½ pints	20–60 gals.	785	6,689

BUSH CLEARING

Plots Cleared		Extent	
1960	1961	1960	1961
693	–	371 acres	451 acres

Biological Mosquito Control

Durban with its humid climate and the swampy nature of its low-lying areas, favours the development of mosquitoes. As the City has expanded so have the mosquito problems been met, by spraying, reclamation and drainage.

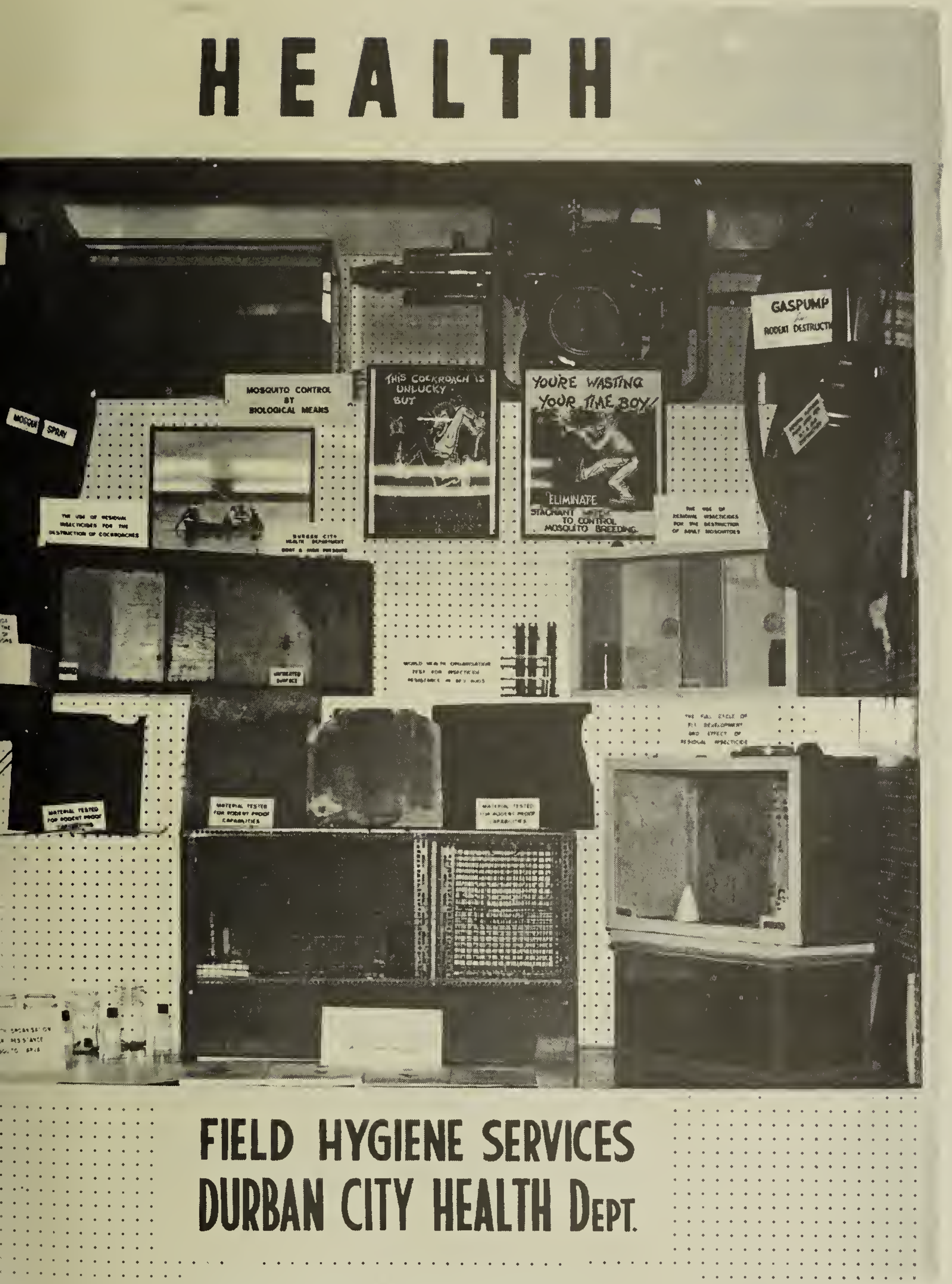
Thinking back to the early part of the century, the Eastern Vlei was drained and reclaimed. On this site sports fields, a golf course and modern flats now stand. Harris Park, reclaimed by domestic refuse, now awaits development. More recently the Van Riebeeck Park swamp was drained into the sea by the construction of a tunnel under the Bluff.

During all these projects of drainage and reclamation,.it has fallen to the lot of this Department to combat mosquito development.

Despite the advances made in spraying techniques and modern insecticides, it is safe to say that in large expanses of water complete destruction of mosquito larvae cannot always be achieved. From observations in mid-summer it has been noted that culicine mosquitoes will

Insecticide Spraying of Street Drains against Cockroaches.

Introduction of Mobile X-Ray Facilities at kwaMashu Bantu Township
for Detection of Pulmonary Tuberculosis.


HEALTH
MOSQUITO CONTROL BY BIOLOGICAL MEANS
THIS COCKROACH IS UNLUCKY BUT
YOU'RE WASTING YOUR TIME BOY!
ELIMINATE STAGNANT WATER TO CONTROL MOSQUITO BREEDING
GASPUMP
RODENT DESTRUCTI
THE USE OF RESIDUAL INSECTICIDES FOR THE DESTRUCTION OF COCKROACHES
MATERIAL TESTED FOR RODENT PROOF CAPABILITIES
FIELD HYGIENE SERVICES
DURBAN CITY HEALTH DEPT.

Pest Control Methods displayed at
Durban July Exhibition,
1961.

Introduction of Fish (Tilapia) to Sewage Maturation Pond for Biological Control of Mosquitoes.

complete their full cycle of development in five days. Oil has been found to be ineffective on large expanses of water, whilst certain waters react with emulsifiable insecticides, rendering them ineffective. These factors subject residents living in close proximity to these swamps to sporadic outbreaks of mosquitoes.

During 1960 much thought was given to this problem and after extensive experiments, both in the field and the laboratory, the following important points were established:

1. Treatment of water with oil or other insecticides, in sufficient quantities to destroy mosquito larvae, will also destroy all other aquatic and plant of oxygen Eventually after prolonged treatment these waters become deprived of oxygen and have a high content of organic matter. The result is that they will only support mosquito life.

2. Fish in sufficient numbers and in unpolluted waters will control and eventually eliminate mosquito development.

3. Platana frogs feed on mosquito larvae and, like fish, when kept in a tank show a preference for a diet of mosquitoes over other natural foods.

4. Dragon fly larvae (nymphs) known as the "Tiger of the Pond" live in water, clinging to stems of aquatic plants. They feed voraciously on the smaller species of aquatic life, including mosquito larvae.

5. Certain small tree frogs which abound in the around natural swamps feed on adult mosquitoes.

6. Where certain plant life is abundant, mosquitoes do not appear to favour development. An instance of this is the well-known water weed Welffan Lemnia and which is found in the Beachwood area.

7. Water containing high organic content, or water polluted by domestic refuse, provides the ideal medium for mosquito development. Furthermore, emulsifiable insecticides are ineffective in this type of water.

As has been stated, spraying destroyed all this aquatic life and gave rise to unchecked mosquito development. Having established these facts, it was decided to encourage natural life and thereby establish biological control of mosquitoes.

The first step in this direction was to change over from what had for many years become standard policy, i.e. "routine spraying of all potential mosquito breeding conditions once weekly", to "spraying only where mosquito development is actually found". The first effects of this new programme were soon in evidence at a swamp situated to the south of Van Riebeeck Park and and known as "Happy Valley". Mosquito nuisances from this swamp had been an annual occurrence to nearby residents and the occupants of a large hospital. Fish, insect life, frogs, birds, etc. soon established themselves in large numbers; spotter returns showed a marked decrease in mosquito development and complaints became the exception rather than the rule. What could very easily have developed into a foul quagmire is now a naturalist's dream. Regular surveys were maintained through the swamp and, if any subsidiary pools developed which could give rise to mosquito development, rather than spraying, ditches were cut to give access to the main swamp.

Encouraged by this success at Happy Valley, the Department then turned its attention to mangrove swamps in the northern suburbs. These swamps, situated in close proximity to a high class residential area, are fed by back waters from the Umgeni River and are, to a certain degree, tidal. Yearly outbreaks of mosquito nuisances were attributed to this source. Spraying proved ineffective and costly and, on one occasion, even gave rise to further nuisance when decaying vegetation resulted in most offensive smells. Chemical examination of these waters indicated a considerable quantity of sewage effluent, resulting no doubt, from the nearby dwellings which are dependent upon septic tanks for sanitation.

To render these waters suitable to sustain aquatic life, access drains connecting the swamp to the Umgeni River were deepened so that natural flushing could take place at every high tide and, more especially, over the spring tide period. All spraying was stopped and, as at Happy Valley, large quantities of fish and other aquatic life were soon abounding with the same fall-off in mosquito development. During the past summer no mosquito nuisances have been traced to this source and spraying has been confined to the treatment of isolated pockets.

To the south of the City a medium sized pond and swamp covering approximately 0.9 acres, known as "The Mere", and situated at or below sea level, had for years given rise to prolific mosquito development. The decision to establish an Asiatic housing scheme reaching almost to its banks made it imperative that some form of mosquito control be introduced. Drainage was impossible and, although total reclamation is the ultimate aim, this is not likely to be completed for many years.

Unlike Beachwood and Happy Valley, the waters of "The Mere", highly polluted not by organic matter but by industrial waste and storm water, gave little indication of any life other than mosquitoes. In February, 1961, after an inspection by members of the Natal Parks, Game and Fish Preservation Board, it was decided to introduce fish into "The Mere". From that date all spraying was stopped and on 9th March, 1961 ± 100 lbs. of fish, (Tilapia mossambica and melanopleura in equal numbers) were introduced from the Hatchery at Nagle Dam. Inspections showed a high mortality in these first fish introduced, but it was felt that at least 50% had survived. Mosquito development was still being found during March and April but young fish were evident at the end of April, and In May there was a definite decline in mosquitoes.

A further 100 lbs. of fish were introduced in May of which, once again, it was estimated 30 – 50% survived. Between May and December, 1961, regular inspections showed no mosquitoes but prolific fish life together with dragon fly nymphs and other aquatic life. Enquiries at adjoining residences disclosed a very low incidence of adult mosquitoes. A recent water analysis from "The Mere" is submitted for general information :

Permanganate Value (4 hours)	66.4 p.p.m.
Nitrate Nitrogen	Nil "
Ammoniacal Nitrogen	1.9 "
Chloride	182 "
Chromium	Nil "
Dissolved Oxygen	Nil * "

*This last value could be due to delay between the time of taking the sample and time of analysis, and does not necessarily reflect the state of the water at the point of sampling.

The establishment of maturation ponds at the Bantu Village, kwaMashu's Sewerage Works, faced the Department with the problem that these ponds, three in number and of approximately 6 acres each, would probably provide an ideal medium for mosquito development. These maturation ponds are fed with humus tank effluent having the following analysis:

Permanganate Value	10–15 p.p.m.
Ammoniacal Nitrogen	0–10 "
Nitrate Nitrogen	20–40 "

After discussion with the City Engineer, it was decided to stock the ponds with fish of Tilapia species in November, 1961. The fish were again obtained from the Nagle Dame Hatchery and introduced in the following stages:

Pond (1)	33 lbs. of fish	(± 140 fish)
Pond (2)	100 lbs. "	(± 500 fish)
Pond (3)	156 lbs. "	(± 700 fish)

Fifty seven fish failed to survive the transfer.

It is still early to determine if these fish will multiply, but the signs are that they have survived. Their development will become apparent only in the course of the next summer. It is our intention to use these ponds as a reservoir for further fish stocking. To enable members of the Department to transfer fish from one point to another it became incumbent upon me to obtain the necessary authority from the Natal Parks, Game and Fish Preservation Board. This permit is issued annually and expires on 31st December each year.

The benefits from biological control will be appreciated when it is realised that routine spraying of "The Mere" took 1 European General Assistant, 15 Bantu labourers, together with a power pump and boat, 2 days to spray and that 2 gallons of Malathion 50% concentrate and 90 gallons of malarial oil were used in each application. To keep any sort of control, spraying was necessary every 10 days during summer and every 14 days in winter. The financial saving, although considerable, is secondary in consideration to the discovery that a permanent solution has been evolved.

In conclusion, I must pay tribute to the Natal Parks, Game and Fish Preservation Board, and Dr. Wager, the Senior Plant Pathologist, without whose able assistance and advice, the success outlined above could not have been achieved.

X NIGHT SOIL AND REFUSE DISPOSAL

The cleansing and nightsoil services in Durban are undertaken by the City Engineer's Department, and the following report has kindly been furnished by the City Engineer:

"Conservancy

The following services were provided in the City.

District	1961	1960
Sydenham	372,353	348,989
Greenwood Park	424,439	401,998
South SCoast	430,974	429,810
Bluff	300,159	312,726
Umhlatuzana	294,669	292,939
Mayville	412,817	400,187
	2,235,411	2,186,649

Refuse Removal

The collection and disposal of refuse was carried out regularly throughout the year. A total of 422,896 cubic yards was handled compared with 371,198 cubic yards in the previous year. The revenue from the collection of trade refuse was R72,167 compared with R66,232 in the previous year - an increase of R5,935.

The mechanization of tipping procedure in regard to refuse disposal has increased immensely the efficiency of this activity.

Street Sweeping/Washing

The sweeping of the streets of the City was continued regularly through the year and approximately 25,434 cubic yards of sweepings were collected compared with 30,497 cubic yards collected in 1960, a decrease of 5,063 cubic yards. Nightly washing of the Central City Areas was continued

Composting

The composting of refuse has continued during the year under review. The approximate total revenue received from the sale of compost for 1961 was R7,445 compared with R7,052 for 1960 – an increase of R393.

Salvage

Salvage realised R3,417 compared with R3,592 in the previous year - a decrease of R175.

Public Conveniences

No new premises were constructed but in view of the need for planning under this heading this subject will be given early attention

Waterborne Sewerage:

The whole of the Old Borough has waterborne sewerage. To keep pace with the development of the City a programme of reconstruction and relaying of the trunk sewers is in hand, this work being related to the construction of the Central Disposal Works to be built on the eastern side of the Bluff.

Progress has continued on the laying of the trunk sewer through the Amanzimyana and Merebank Areas. This sewer will collect the flow from the southern areas for eventual treatment at the southern Sewage Treatment Works. It is anticipated that this major sewer will be completed during 1962.

In the incorporated areas the extension of the reticulation is being steadily carried out and additional properties in the Mayville, Sydenham, Greenwood Park, South Coast Junction, Clairwood and Bluff Areas have been brought on to waterborne sewerage.

Private township development such as Glenmore/Carrington Heights and Parlock have been reticulated, the latter township having its own sewage treatment works.

The Council's own housing schemes receive due consideration in regard to the provision of this service. Where possible, such as in the Merebank/Wentworth Indian Housing Scheme the sewer reticulation is brought on to the main sewerage. In other schemes such as kwaMashu and Chatsworth it has been necessary to provide separate and individual treatment works.

To serve the Old Main Line area, a main sewer is being laid from Coedmore Road to Bankhead Road in Hillary. This work will continue during 1962.

On completion of the Major Sewage Treatment Works it will be possible to bring in greater areas on to the waterborne sewerage reticulation system, but to avoid overloading of the present system further extensions must perforce be restricted. Nevertheless, it will be the policy to proceed with such extensions during 1962 wherever possible within the limits of the existing works."

XI CONTROL OF AIR POLLUTION

When, early in 1956, the Durban City Council realised that air pollution conditions in the City had reached the stage where urgent positive action was required, the first of a sequence of steps was taken which have taken air pollution control a considerable way towards the final goal. In that year the Cleaner Air Consultative Committee was formed, and shortly afterwards an Air Pollution Engineer was appointed to the City Engineer's Department. Subsequently progress has been made in a steady fashion. In 1957 a survey of all boiler plants was made, and through education and constant co-operation with industries, a gradual improvement began to take place throughout the City. A further important step was taken in 1958, when Durban became the first city in the Republic to promulgate Smoke Control By-laws. The main provision of these by-laws was the prohibition of the emitting of black smoke anywhere in the city. Since their promulgation, all new fuel burning appliances have had to obtain the approval of the City Engineer. A year later the first Smokeless Zone was defined, and this embraced the entire Beach-front area. This was followed in 1960 by the declaration of the entire central area of the City as a smokeless zone. Concomitant with these measures close consultation has been maintained over the past 5 years with the South African Railways and Harbours Administration, which has co-operated by appointing a Smoke Inspector for locomotives, and with the Harbour authorities in respect of smoke emission from shipping. Particular attention has also been paid to the emission of excessive smoke from diesel vehicles.

At this stage it may be well to inquire what results all these measures have achieved. A partial answer to this question is provided in a paper published in "Public Health", entitled "Second Report of Air Pollution Measurements in the Towns of Pretoria, Johannesburg, Durban and East London."* From the measurements taken in the four cities it is apparent that in regard to solid deposits, smoke density and sulphur dioxide content Durban no longer hold the unenviable position of the worst city in the Republic. Indeed, in sulphur dioxide content Durban showed the lowest value of the four cities, and in regard to smokiness and solid deposits Durban has moved down the scale.

An article in the British Medical Journal (October 31, 1959)** dealing with the high lung cancer rates in Europeans in South African cities, and in particular Durban, implicated atmospheric pollution as a primary cause. The results of air pollution measurements quoted above would seem to indicate that an additional cause for high lung cancer mortality must be sought. With this end in view approaches were made by this Department to the Cancer Association of South Africa and the Council for Scientific and Industrial Research in order to try and institute a survey of the known carcinogenic factors in Durban's atmosphere - the so-called "invisible pollutants" along the lines carried out by Stocks in England and Wales, and with particular reference to 3 : 4 benzpyrene, and other polycyclic hydrocarbons. Although no definite assurance has been given the Council for Scientific and Industrial Research is sympathetic to this project.

* E.C. Halliday and E. Kemeny (1962); Public Health 62 : 3.
** G. Dean (1959) British Medical Journal 2 : 857.

The City Engineer has kindly furnished the following report on the progress made in air pollution control measures during 1960.

"Smokeless Zones

Following the successful implementation of the Beach Front Smokeless Zone Legislation, the entire City Central area was declared a Smokeless Zone by Promulgation in the Provincial Gazette on the 10th of November, 1960. The Department has subsequently given the necessary advice, instructions and numerous stoker demonstrations to ensure that the 800 fuel-burning appliances operating daily in that area are able to comply with the legislation within the time limits allowed. The legislation requires that all these fuel-burning installations operate smokelessly within three months of the date of promulgation of the legislation or that they apply for a temporary exemption which the City Engineer can grant up to two years where expensive replacements may be required. Where it is only necessary to modify existing appliances, these exemptions are normally granted for one year only. The results to date have been most encouraging and a survey of fuel-burning appliances operating in adjoining areas is already in hand with a view to creating further smokeless zones.

Complaints

Throughout the City, 200 smoke complaints were investigated during 1961 and recommendations, stoker demonstrations, etc., were given to preclude further complaints. Thirty complaints were received regarding odour emission from the Oil Refinery. These were jointly investigated to prevent a repetition. Only five complaints of odour emission from the Whaling Station were received in 1961 due to the improvement in the caustic scrubbing system on the gaseous meat meal dryer.

Throughout 1961, One Hundred and Sixty-Three complaints of odour emission have been received which have not been traced to any specific source. The complaints generally describe the odour as "sewage, drains, onion, oil refinery or sulphide", and they generally occur during the late evening or the early morning when the wind is blowing from the North to the North-East Sector. Similar odours are experienced from time to time along the North Coast and the Department is of the opinion that the majority of these odours originate North of the Durban boundary. A committee has therefore been formed under the convenership of the City Engineer, including representatives of the Regional Medical Officer of Health, the City Medical Officer of Health, The South African Railways, whose Health Inspectorate operate up the North Coast and the South African Police, whose mobile patrols along the North Coast have been alerted and asked to report any instances of odour emission etc. The City Engineer's Department has established wind recording instruments on Virginia Reservoir at the Northern boundary of the City but the source of the odour emission has still to be identified.

Industry

With regard to Industrial Smoke Emission, the monitory and advisory scheme adopted by the City Engineer's Department whereby each firm receives a monthly record of their smoke emission, continues to be well received and ensures their co-operation in keeping smoke emission down. At the beginning of 1957, there were no industrial boiler plants operating in Durban with no observable smoke emission, but the latest returns for 1961, show that sixty-four industrial firms have now achieved this high standard. Besides on the spot advice and stoker demonstrations, the City Engineer's Department again arranged courses in the Natal Technical College and the M.L. Sultan College on efficient boiler management for the instruction of Managers, Engineers and Boiler Operators throughout the City. Illuminated Certificates of Merit were awarded to those firms consistently recording negligible smoke emission throughout 1960 at a Ceremony held in the Silver Jubilee Hall on the 23rd June, 1961 when twenty-five certificates were presented by the Deputy Mayor to the Industrialists concerned. Arrangements are in hand for a similar presentation to those firms recording negligible smoke emission throughout 1961.

Locomotives, Ships and Diesel Vehicles

Five Hundred and Seventy-three instances of Railway Locomotives emitting excessive smoke in the Durban area have been reported to the Local System Manager, for his attention and, following representations made by the Municipality, the South African Railways have reappointed their original Smoke Inspector to ensure reduction of smoke emission from locomotives. Two Thousand and Thirty-five ships called at Durban during the year and One Thousand, Two Hundred and Eighty-six of these were visited to ensure their co-operation in the Durban Cleaner Air Campaign while in harbour. Four Hundred and Seventeen of these ships were smoking at the time of the Inspector's visit, and, in the majority of cases, this was quickly rectified. One Thousand, Two Hundred and Fifty-five Public Service vehicles were sent to the Municipal Testing Grounds for inspection regarding the excessive smoke emission and, although the vehicles had received ample warning to effect the necessary repairs, One Hundred and Fifty of these vehicles were temporarily suspended after inspection until the necessary improvements had been made and the exhaust emission was considered satisfactory In addition to the foregoing, it was necessary to report to the Municipal Transport Department, during the first half of the year Five Hundred and Four instances of Corporation vehicles emitting excessive smoke, but from the 20th July, 1961 the Corporation vehicles were dealt with in exactly the same way as privately-owned vehicles and on receiving notice of excessive smoke emission have to effect the necessary repairs and be checked at the Municipal Testing Grounds."

XII MILK SUPPLIES

The City's milk supplies are drawn in the main from the midlands of Natal and East Griqualand. Milk from some 704 producers is bulked and cooled at 9 up-country balancing stations. Thereafter it is transported to Durban mainly by insulated tankers. A small quantity is received directly from the producers in locked cans.

The milk is pasteurised and bottled at four receiving depots in or on the periphery of the City and in addition to bottled milk a small amount is packed in heat sealed waxed containers.

It is then delivered to sub-distributing points by refrigerated pantechnicons and final delivery to the consumer is by means of hand carts.

Milk Gallonage 1961		Average Daily Gallonage
Intake		34,701,20 *
Shrinkage	34.47	
Distributed Outside Durban	6,171.06	
Consumed in Durban		28,495.67 *

* In addition to these figures a total of 36,745 gallons of raw milk was distributed in Durban up to the end of August, when supply was discontinued. This represents an average of 151.21 gallons per day up to the end of August.

Sampling

Regular sampling of all milk and milk product supplies was carried out. Samples were delivered to the Departmental Milk Laboratory for bacterial and chemical analysis. In addition samples were submitted to the State Chemical Laboratories and to the City Analyst for Chemical Analysis.

Structural Requirements:

The process of gradual improvement in the structures of dairy farms has continued. The following table indicates the structural progress made to 704 dairy premises during the past year.

Standard of Premises	Percentage Conforming to
91% to 100%	13%
81% to 90%	39%
71% to 80%	39%
61% to 70%	6.5%
51% to 60%	2.1%
Below 50%	Nil

Number of Samples taken under Food, Drugs and Disinfectants Act

Milk	230
Cream	36
Ice Cream	40
Samples taken for T.B. examination	66.

Prosecutions

Food, Drugs and Disinfectants Act	Nil
Milk (and Milk Products) By-laws	6

Balancing Stations:

Regular inspections of up-country balancing stations have been carried out throughout the year. The standard throughout was good, as regards both the structural and handling aspects.

Pasteurising Depots

Regular inspections of the four depots have been carried out and a close watch kept on handling methods and staff.

Introduction of Ice Cream

During the year an appeal was lodged against the decision of the City Medical Officer of Health, who in 1960 had refused an application by an Ice Cream Manufacturer situated outside the City area to introduce ice cream and soft dairy mix into the City.

On the 13th February 1961 the appeal against the City Medical Officer of Health's decision was heard by the Public Health Committee. The Committee unanimously dismissed the appeal and confirmed the decision of the City Medical Officer of Health.

Pirate Milk Supplies

Regular checks were made at Durban railway station and at other points throughout the City regarding the possible introduction of unauthorised milk. One "pirate" supplier was found to be introducing cream into the City. Legal proceedings were instituted with the result that an admission of guilt was obtained from both the supplier and retailer.

Statistics – Inspectional Programme

Total Dairy Inspections	2,860
Total City Dairy Inspections	1,620
Total Ex-City Inspections	1,148
Initial Dairy Farm Inspections	92
Country Depot Inspections/Sampling	254
Personnel Vi-Tested/Immunised	1,029
Personal Notices to Producers	164
Written Notices to Producers	822

Number of Samples Taken Under Food, Drugs and Disinfectants Act

Milk	230
Cream	36
Ice Cream	40
Samples taken for T.B. Examination	66

Prosecutions

Food, Drugs and Disinfectants Act	Nil
Milk (and Milk Products) By-Laws	6

LABORATORY CONTROL OF MILK SUPPLIES

The following tests were performed during the period under review, the figures for the previous year being given in parenthesis.

Bacterial Counts (Breed Clump Counts)	7,438	(7,819)
Presumptive B. coli Tests	1,817	(1,107)
Eijkmann Tests (for E.Coli Type I)	255	(211)
Methylene Blue Reduction Tests	208	(214)
Resazurin Reduction Tests	120	(397)
Phosphatase Tests (Aschaffenburg and Mullen Method)	2,016	(2,237)
Plate Counts (Roll Tube Method)	1,694	(1,070)
Titrateable Acidity Tests	220	(214)
Brucellosis Tests (Stained Antigen)	1,137	(954)
Sediment Tests for Visible Dirt	7,310	(7,189)
Butterfat Determinations	10	(5)
Freezing Point Determinations	4	(3)

Tuberculosis (Biological)	66	(185)
Mastitis (Direct Microscopic)	8,896	(10,886)
Tests for Inhibitory Substances	3,879	(210)
Tests for Thermoduric Organisms	338	(56)
Turbidity Tests on Sterilised Milk	36	(28)

The following reflects a suj
The following reflects a summary of tests done throughout the year on various dairy products.

(a) Pasteurised Milk

The Milk (and Milk Products) By-laws provide for "Except with the written consent of the Medical Officer of Health .... no milk dealer or other person shall sell any milk or milk products for human consumption unless such milk or milk products have been pasteurised or sterilised in a milk depot within the City".

At the time of promulgation of these amendments to the By-laws only one raw milk dealer was registered. He has now voluntarily elected to supply milk for pasteurisation and no raw milk is consumed in the City.

There are four pasteurising depots in and on the periphery of the City and bottled milk is purchased every day from each distributor during delivery rounds and also at distribution centres. Pasteurised milk supplied in cans is also sampled at regular intervals.

Test	No. of Samples (Bottled Milk)	Percentage Satisfactory	No. of Samples (Canned Milk)	Percentage Satisfactory
Phosphatase	1061 (1593)	99% (99%)	53 (53)	100% (100%)
B. Coli (Presumptive)	801 (480)	70% (73%)	53 (53)	80% (63%)
B. Coli (Eijkmann)	225 (211)	99% (100%)		
Methylene Blue	208 (214)	100% (99%)		
Plate Counts	737 (413)	83% (75%)	53	100%
Titrateable Acidity	208 (214)	100% (100%)		

(b) Ice Cream

Ice cream is manufactured by three companies in Durban. In addition to this the introduction of ice cream was allowed into the City from two companies on the Rand on a temporary basis.

Test	No. of Samples	Percentage Satisfactory.
Phosphatase	209 (152)	100% (100%)
B. coli (Presumptive)	209 (152)	66% (85%)
Plate Counts	209 (152)	93% (91%)

(c) Soft Dairy Mix

Soft dairy mix is manufactured by one firm and sold to tearooms where it is dispensed to the public in a semi-frozen state by means of special machines. Five of these machines are in operation. The hygienic and structural requirements of this Department for operators of these machines are very strict.

Test	No. of Samples	Percentage Satisfactory
Phosphatase	357 (173)	100% (100%)
B. coli (Presumptive)	357 (173)	65% (60%)
Plate counts	357 (173)	95% (82%)

(d) Cream

Only pasteurised cream, processed in the City, was sold to the public.

Test	No. of Samples	Percentage Satisfactory
Phosphatase	160 (146)	100% (98%)
B. coli (Presumptive)	160 (146)	56% (81%)
Plate Counts	160 (146)	93% (84%)

) Producer (Farm) Milk

The majority of raw milk for pasteurisation arrives in the City by insulated road tankers fter being bulked and cooled at inland balancing stations. To acquire information on the quality f individual producers' milk, sampling has therefore to be carried out at these inland depots. ost producers are sampled once a month. Certain tests are carried out at the depot and the samples turned the same day in insulated containers to our central laboratory for further tests. The sults of these tests are made available to the balancing stations for transmissions to producers. he dairies inspectors visit as many farmers as possible, with a view to assisting them with eir problems.

Test	No. of Samples	Percentage Satisfactory
Breed Clump Counts	7,438 (7,131)	77% (71%)
Visible Dirt Tests	7,310 (7,189)	85% (82%)
Mastitis (Microscopic)	8,896 (10,886)	88% (78%)
Brucellosis (Stained Antigen)	1,137 (954)	99% (99%)
Tuberculosis (Biological)	66 (186)	Nil (Nil)
Thermoduric Organisms	338 (56)	70% (–)
Inhibitory Substances	3,879 (210)	97% (–)

Tanker milk, on arrival at the pasteurisation depot in the City, is thoroughly screened efore being accepted and on occasions an entire tanker load of milk has been rejected and re-rned or separated, the producers being paid only for the butterfat value. The stainless steel terior of each tanker with a normal capacity of 2,000 gallons, is thoroughly cleansed and terilised after the delivery of each load. Repeated swab tests have revealed virtually sterile urfaces at practically every examination.

The above mentioned figures point to an overall improvement in the hygienic quality of the ilk. These figures include the East Griqualand area where approximately 13% of our milk supplies ere produced.

Of the 700 odd registered producers there were only 12.5% that were consistently unsatis-actory. Many farmers are realising the value and need for adequate cooling facilities and, in atal, the percentage of dairymen with refrigeration plants has increased from 54% to 60%. 18% of ilk producers make use of milking machines.

It does not appear that there will be a milk shortage in the foreseeable future and whilst the City's average daily milk intake has not increased much above that of last year the potential production of all our registered producers is about 15,000 gallons a day more than that required. At the moment this surplus milk is used for industrial purposes but the fresh milk trade always has first call on it. Although the average daily production per producer remains at approximately 70 gallons the percentage of producers in the 50 gallons-a-day and under category has dropped from 43% to 38%.

(See graphs on page 52.).

Antibiotic Contamination of Milk Supplies.

A total of 3,879 tests for inhibitory substances were conducted on raw producers' milk The disc assay method was employed and a very penicillin sensitive strain of Sarcina lutea used as a test organism. The average results obtained throughout the year showed that 3.5% of all milk samples contained some form of inhibitory substance and it was possible to ascertain with certainty that 1.5% of these were due to penicillin. As a result of appeals from this Department (and also from cheese manufacturers) to farmers not to supply milk from animals that had been treated for mastitis until at least 72 hours had elapsed since the last treatment, the incidence has dropped considerably. Milk from certain specific areas was more prone to contamination, and on odd occasions inhibitory factors were even demonstrated in the bulked tanker supplies on arrival in the City.

Animal Diseases Affecting Milk Supplies.

Mastitis:

Cream smears from routine herd samples were regularly examined for organisms associated with mastitis, particularly chronic streptococcal mastitis. Out of a total of 8.896 such examinations, 12% showed the presence of the disease. During the previous year the incidence was 22%.

Apart from the abovementioned examinations a free diagnostic service is also offered to registered producers as are sterile sampling bottles for udder and quarter samples issued by the milk laboratory.

Tuberculosis:

A limited number of biological tests for tuberculosis were conducted on producers' milk. We were directed by condemnation returns from City abattoirs in the choice of these herds. No active voiders of tubercle bacilli were discovered in these tests.

An active campaign against bovine tuberculosis is conducted by the State Veterinary Department and regular tests are done on accredited herds, under the interim scheme and for diagnostic, export and import purposes. Out of a total of 15,635 intradermal tests, there were 1.2% positive and 1.8% suspicious reactors. The incidence of the disease was more pronounced in the humid coastal area.

Brucellosis:

A total of 1,137 tests using the Stained Antigen Ring Test technique were conducted on raw milk supplies. Approximately 1% were positive. Regular tests for B. abortus bovis are also conducted on bovine blood serum by the Veterinary Research Laboratories at Allerton, Pietermaritzburg.

Out of 1,488 such tests there were 6% positive and 3% suspicious reactors. Calfhood immunisation with a reliable vaccine is practised by many farmers.

Infectious Bovine Infertility:

In certain areas of Durban's milk shed infertility was a serious problem amongst breeding stock. Trichomoniasis, infectious epididymitis and vaginitis, granular vaginitis and vibriosis all contributed towards the problem. Artificial insemination was practised extensively and a new bull station of the Natal Artificial Insemination Co-operative near Richmond was recently brought into operation.

Other Diseases:

Other diseases that have affected the production of milk directly and indirectly are paratyphoid and calf diphtheria in young stock, three day stiff sickness and piroplasmosis and anaplasmosis. In Natal and East Griqualand anthrax was responsible for 28 outbreaks involving 163 deaths amongst bovines and a total of 141,262 cattle were immunised by the State Veterinary Department. Other causes of death in dairy stock have been chemical poisoning especially with arsenic and also plant poisoning. Internal parasitism is causing much concern and an extensive survey is at present being carried out by the State. (Much of the abovementioned information has been made available through the courtesy of the Sub-Director of Veterinary Services: Natal.)

General:

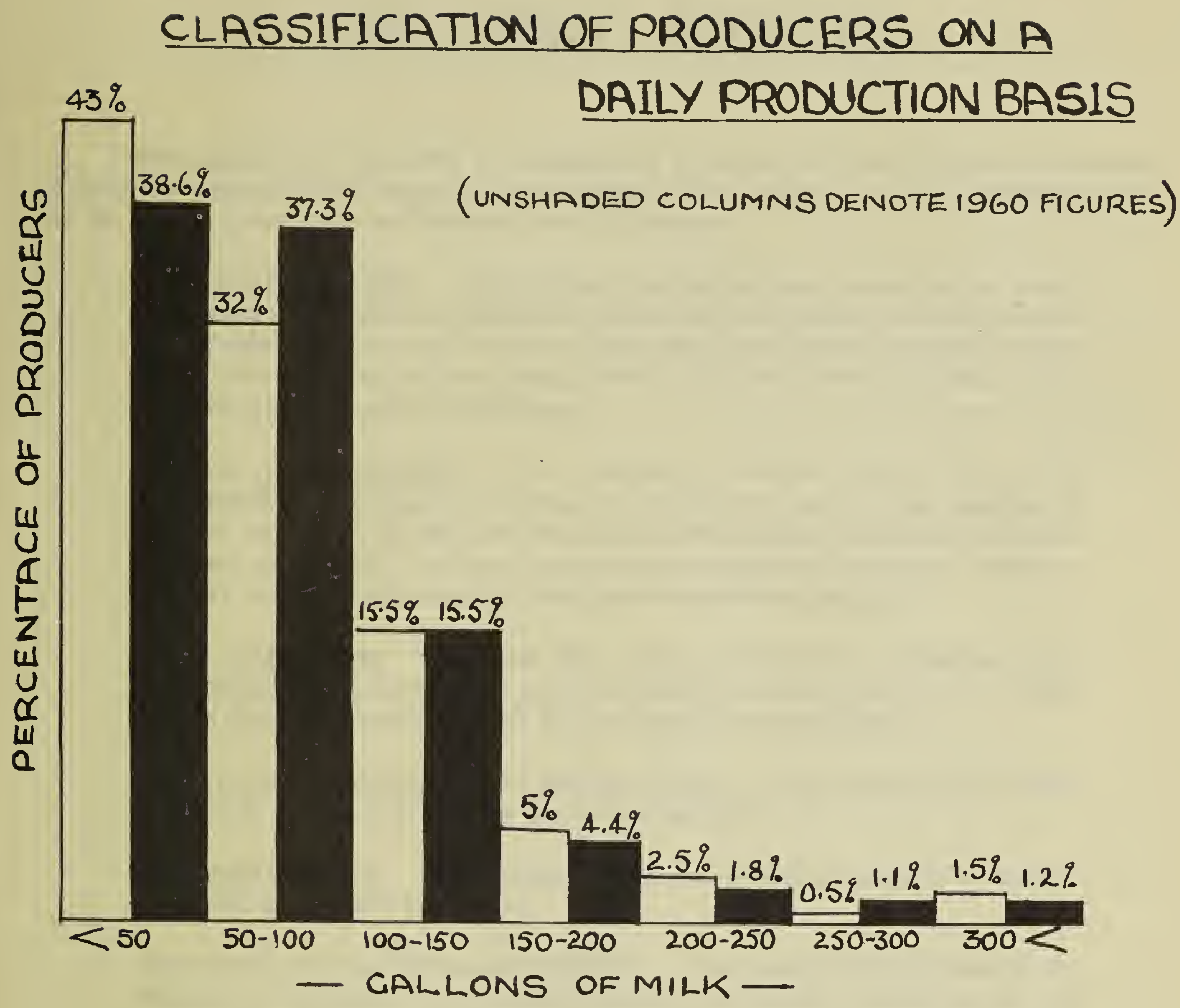
1. Meetings of the Natal Society of Dairy Technology were regularly attended by the Veterinary Medical Officer who also participated in the presentation of scientific papers.

2. A short course in dairy hygiene and technology was arranged by the Natal branch of the Institute of Public Health in conjunction with the Agricultural Faculty of the Natal University. This course was well attended by health officials from various parts of the Republic.

3. Nine final year veterinary students from Onderstepoort spent three weeks in the Veterinary Hygiene Section of this Department and at the City Abattoir as part of their vacational training in Special Hygiene and Food Technology.

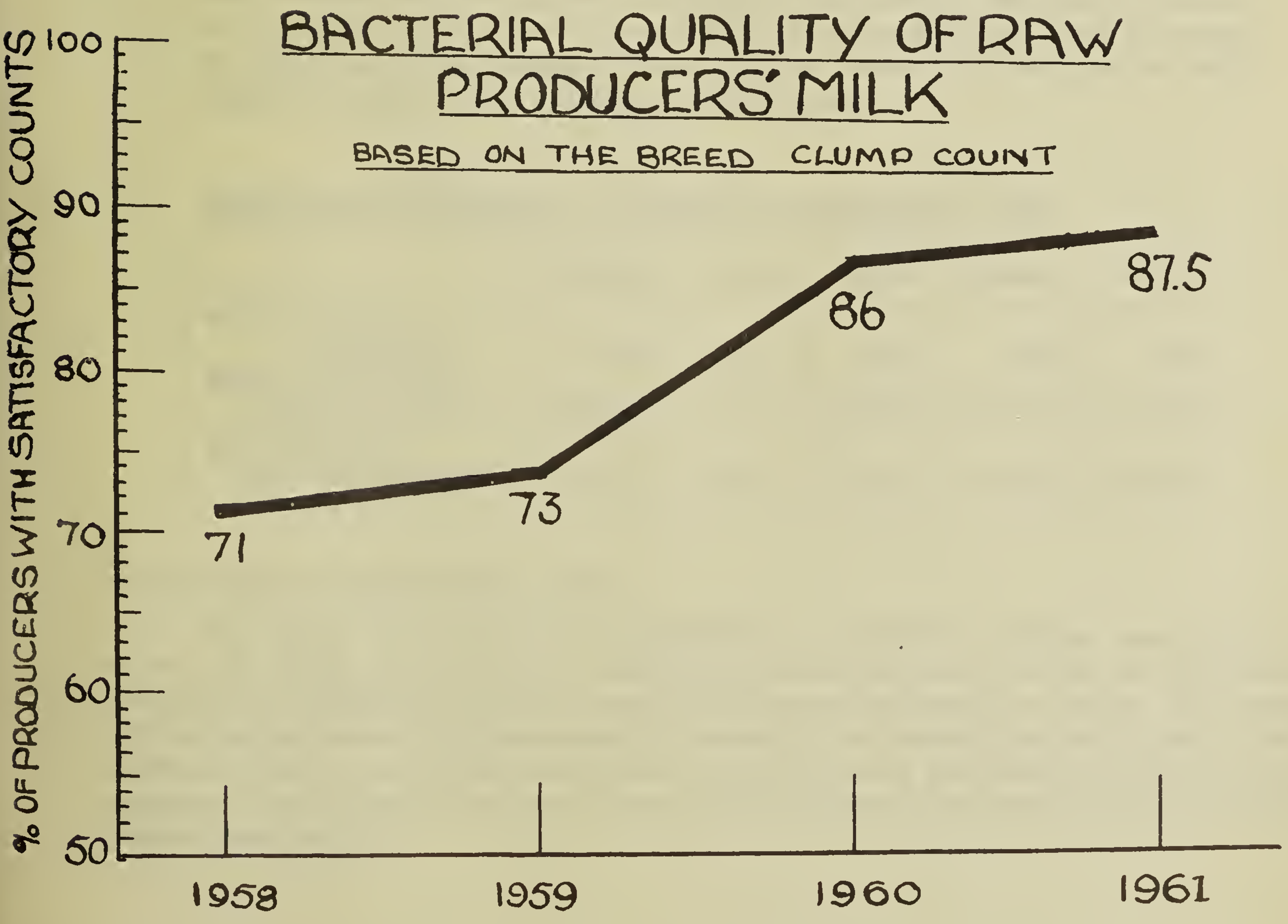
4. The Veterinary Medical Officer undertook the professional duties at the Municipal Abattoir in the absence of the Abattoir Director.

5. During the year the Fifty-Sixth Annual Congress of South African Veterinary Medical Association was held in Durban, the first Congress in the history of the Association to be held away from Onderstepoort. The Congress was attended by the veterinarians in the employ of the City Council as well as other officials from this Department. Amongst the papers presented a symposium on "The Use of Milking Machines" was of special interest.



CLASSIFICATION OF PRODUCERS ON A DAILY PRODUCTION BASIS

(UNSHADED COLUMNS DENOTE 1960 FIGURES)



BACTERIAL QUALITY OF RAW PRODUCERS' MILK

BASED ON THE BREED CLUMP COUNT

XIII MEAT SUPPLIES

The inspection of all meat for consumption in Durban is carried out at the Municipal Abattoir by qualified Meat Inspectors. I am indebted to the Director, Dr. F.E. Cavanagh B.V.Sc. for the following brief report on the operation of the Abattoir:

> "**SLAUGHTERHOUSES:** The official "controlled" area served by the Municipal Abattoir is bounded by Maidstone, Bothas Hill and Winklespruit, and provides an efficient and economic service to the many small local authorities within these boundaries, as well as a large centralised market where the producer may dispose of his livestock to advantage.
>
> **SYSTEM OF SLAUGHTER:** The slaughter of Animals Act No. 26 of 1934 (as amended) lays down the methods which may be used in the slaughter of animals. In Durban, bovines are first stunned with humane stunning pistols, and pigs are electrocuted, but sheep and goats are slaughtered by throat cutting to meet the religious requirements of the large Mohammedan community.
>
> **MEAT INSPECTION:** Carcases and offals are examined in accordance with the Regulations published under the Public Health Act No. 36 of 1919, by a staff of qualified meat inspectors under the supervision of a Veterinarian
>
> **TREATMENT OF CONDEMNED CARCASES, ETC:** All condemned and waste material is dealt with in terms of the Public Health Act.
>
> **BUTCHERS' SHOPS:** Supervision of premises throughout the City is carried out by the City Health Department.
>
> **GOVERNMENT COMMISSION OF ENQUIRY:** The Commission appointed by the Minister of Agriculture to investigate abattoirs and allied facilities has not yet completed its itinerary. The Tradihg Undertakings Committee of the City Council have decided that the expansion programme which will be necessary in Durban for the next five years shall be constructed on a temporary basis, and a decision to either erect a new abattoir or remain on the present site will only be made when the findings of this Commission become known.

CARCASES CONDEMNED AT MUNICIPAL ABATTOIR : 1961.

	Bovines	Calves	Swine	Sheep	Goats
Whole Carcases Condemned	1,353	342	1,165	1,669	59
Portions of Carcases Condemned in lbs.	349,666	223	40,905	2,089,930	3,601
Total Number of Animals Slaughtered	102,725	10,326	59,538	499,053	21,582

Meat Vehicles and Transportation of Meat

The way in which meat is transported from the Abattoir in Durban leaves much to be desired. The method which has been employed for many years has been the horizontal stacking of carcases on flat-bodied lorries, the whole being covered by tarpaulin or canvas. The unhygienic evils and unsightliness of this anachronistic practice are so obvious that they require no detailed observation here. It will suffice to say that it is rapidly being abandoned in most other civilised countries. In South Africa other cities, notably Port Elizabeth, have taken the lead in introducing hygienic meat vehicles.

Accordingly during 1961 an attempt was made by this Department to bring about a change to modern enclosed vehicles, with provision for the suspension of carcases, over a conversion period of four years.

The opposition of the meat trade, if not objective, was powerful. The City Couhcil although sympathetic did not see its way clear to support the Departmental proposals and the matter has temporarily lapsed.

On the credit side is the fact that a few meat traders have voluntarily converted their vehicles to the desired type. The advantage to themselves inherent.in the new method, quite apart from hygienic considerations, will no doubt penetrate the awareness of their competitors in due course. I believe that the change will inevitably come about throughout South Africa sooner or later. Progress will not be denied. It is only a pity that Durban in this instance, is not in the vanguard.

XIV WATER SUPPLIES

The water supply to consumers in Durban has been maintained at the highest state of purity. From its source in the Umlaas and Umgeni Rivers, where it is impounded in the Shongweni and Nagle Dams respectively, it is piped to various filtration and purification works under the control of the City Engineer's Department. Regular bacteriological and chemical examination of water from a series of check points is undertaken by the City Engineer's laboratory.

During the year it was decided to institute a system of independent checking by this Department from random points throughout the City. These samples were sent to the State Health Department laboratory for examination. In this way a dual check is kept on the purity of water supplies reaching the consumer.

I am indebted to the City Engineer for the following information :-

" (a)	Total Water Consumption August, 1960 – July, 1961	17,612,815,900 gallons
(b)	Daily Average Consumption August, 1960 – July, 1961	48,254,290 gallons
(c)	Maximum Daily Consumption August, 1960 – July, 1961	58,499,800 gallons
(d)	Minimum Daily Consumption August, 1960 – July, 1961	38,332,800 gallons
(e)	Total Capacity of Reservoir impounded by the Nagle Dam	5,425,000,000 gallons
(f)	Total Capacity of Reservoir impounded by the Vernon Hooper Dam, (Shongweni)	1,598,000,000 gallons

(g) **Purification Works**

Capacity (Gallons per day)

(a)	Durban Heights	50,000,000 gallons
(b)	Northdene	7,000,000 gallons
(c)	Coedmore	4,500,000 gallons
(d)	Umlaas	2,500,000 gallons

Chemical Standards (Average of Umgeni and Umlaas Water for Distribution)

pH	7.2
pHs	9.1
Colour (Lovibond)	10
Conductivity	96
Turbidity	0.5

Parts per million of

Total Solids	75
Dissolved Solids	75
Suspended Solids	Nil
Chlorine (Cl)	14
Fluorine (Fl)	Nil
Iron (Fe)	0.09
Silica (SiO_2)	8.4
Ammoniacal Nitrogen	0.009
Albuminoid Nitrogen	0.041
Nitrite Nitrogen	Nil
Nitrate Nitrogen	0.18
Permanganate Value, 4 hours	0.6
Free Carbon Dioxide	2.7

Hardness, as $CaCo_3$

Total	35
Calcium	17
Non-Carbonate	4
Carbonate	31
Soda Alkalinity	1

Bacteriological Standards Bact. coli (Most Probable Number in 100 cc Water)

	Presumptive %	Faecal %
(a) City Supply		
0	79.5	96.2
1 – 2	12.4	2.4
3 – 10	6.7	1.4
11 – 25	1.4	Nil
Over 25	Nil	Nil
(b) Water to Shipping		
0	60.0	100
1 – 2	22.0	Nil
3 – 10	18.0	Nil
11 – 25	Nil	Nil
Over 25	Nil	Nil

Future Supplies:

The augmentation of the Durban Water Works Undertaking to meet the increasing demand for water is still the subject of negotiations with the Government Department of Water Affairs.

Apart from the supply to one or two Bantu Townships, domestic water is not metered in Durban.

Swimming Baths:

All swimming baths provided by the City Council have been fitted with efficient filtration and chlorination units. Regular checks of all bath waters have been maintained by the City Engineer, and the British Ministry of Health standards complied with as far as possible. Analytical results are furnished regularly to this Department.

Bathing Beaches:

Bacteriological surveys of beach and harbour waters have been continued as in previous years, and the results of these tests are submitted to this Department at monthly intervals.

XV LEGISLATION

Methyl Bromide

In 1954 this Department first raised the question of the need for control of fumigation with this lethal gas, which was then coming into use for the fumigation of premises mainly for the control of timber pests. In view of the possible dangers of this process, the Secretary for Health was requested to introduce legislation to ensure the adoption of suitable safeguards. Fortunately the fumigant at that time was being used only by reputable firms who voluntarily undertook to comply with existing regulations, which although not applicable to methyl bromide were nevertheless designed to control another dangerous gas. These representations were repeated by this Department in subsequent years.

The State Health Department finally accepted the principle of control and draft regulations under the Public Health Act, No. 36 of 1919, were circulated in February, The City Council had no criticism to offer to the proposed regulations, subject to incorporation of several minor amendments.

Offensive Trade Regulations : Establishment of Oil Refinery

During the year the Department was involved in preliminary discussions regarding the establishment of a second refinery within the City. As the Regulations place the responsibility on the Medical Officer of Health to grant the necessary permission, it was essential for the Department to be satisfied that no nuisances were likely to endanger the public health. Preliminary planning and development is under way and the refinery management has undertaken to comply with departmental requirements.

Malaria Regulations

Early in the year the Secretary for Health circularised a draft amendment to the Regulations for the Prevention of Malaria and other Mosquito-borne Diseases and for the Destruction of Mosquitoes embodying the proposal that the Department of Health be authorised to perform spraying of native huts in certain schedule areas. The City Council had no criticism to offer to the proposed amendment, which has not been gazetted as yet.

Food, Drugs and Disinfectants Act: Honey

Following upon the previous year's policy of checking on the adulteration of honey offered for sale in the City, great attention was paid to the sampling of this product. In five instances it was found that adulteration with commercial sucrose had taken place and, apart from the institution of legal proceedings, the details were reported to the State Health Department. As a result certain sources of adulterated honey in another Province were closed down.

Extension of Borough Boundaries

(a) Chatsworth

With a view to the development of a large housing scheme for the Indian community, the City Council petitioned the Administrator to authorise the incorporation into the City of Durban of an area of land which hitherto had fallen under the jurisdiction of the Local Health Commission in its administration of the Health Areas of Cavendish and Mhlatuzana. Certain other land was also incorporated.

(b) Bluff

The extremity of the Bluff, comprising mainly the Island View oil sites and a large area of Government-owned land, has always been excluded from the jurisdiction of the City Council, and in fact fell under the control of the Magistrate at Pinetown. The City Council considered that it would be advantageous to incorporate this "pocket" within the City and representations were accordingly made to the Administrator. A report on the public health implications was submitted by this Department.

(c) Isipingo

Over a period of some years, discussions have been held regarding the need of a change of status of the areas lying to the South of the City known as Isipingo Beach and Isipingo Rail. Various proposals had been made including incorporation of these areas into Durbanl Finally, during the year under review, the Administrator decided to combine the Borough of Amanzimtoti, the Township of Isipingo Beach, and the area of the Isipingo Rail Health Committee to constitute an enlarged Borough of Amanzimtoti.

(d) Yellow Wood Park

Incorporation of the area, now known as Chatsworth created a pocket on the Old South Western boundary of the City. The area comprised the residential development scheme of the Yellow Wood Park under the control of a Health Committee, and certain other land in the ownership of the Stainbank Estate. The Council was desirous of incorporating this area and the Department was called upon to report upon the implications from the public health viewpoint. However, no decision had been taken on the future of this area at the end of the year.

Public Health By-laws : Refuse Receptacles

In 1959 the By-laws were amended to provide for a standard type refuse bin at the request of the City Engineer, who is responsible for cleansing services. The specification required a refuse receptable to be of rigid construction, of non-corrugated galvanised mild steel and of a minimum of 18 gauge. Since then a new type of material in the form of hard black rubber has come on to the market and as it was found to be satisfactory in practice, the by-laws were amended to permit its use by householders.

Milk (and Milk Products) By-laws : Introduction of Ice-cream

An application was lodged for the Medical Officer of Health's permission to introduce ice-cream from a rural area some 100 miles distant from Durban. After the fulliest investigation it was considered that the necessary permission should not be granted and the application was accordingly refused. The applicant, as provided for in the By-laws, appealed against this decision to the Public Health Committee of the City Council, when the action taken by the Medical Officer of Health was endorsed.

Building By-laws : Kiosks

The Durban By-laws lay down a minimum floor area for a food shop of 300 sq.ft., except in the case of a kiosk (from which the vendee is excluded). Here sales, apart from non-food items, are restricted to pre-packed sweets.

This By-law permitted a kiosk of 35 sq.ft. in area and 8 ft. in height, provided toilet requisites were available to the satisfaction of the City Medical Officer of Health, and not more than 2 persons were employed therein. A number of representations were made to the City Council to permit of a relaxation of the By-laws whereby a larger range of food commodities could be sold from kiosks. The By-laws were amended to encompass this, and two types of kiosks are now permitted.

In the first there is provision for a minimum floor area of 200 sq.ft. with a minimum ceiling height of 8 ft. 6 ins. No food may be cooked in the kiosk and the scope of the business must be restricted to the preparation and serving of refreshments, and sale of food as normally permitted in a tearoom. This kiosk must be provided with toilet requirements, wash-up sinks, wash-hand facilities, storage accommodation, piped water supply, suitable drainage and yard area but, in certain circumstances, some of these requirements need not be provided actually within the kiosk, but must be available within a reasonable distance.

Secondly there is a restricted kiosk wherein articles for sale must be confined to newspapers and periodicals; tobacco and tobacconists' requirements; sweets and ice-cream which are factory wrapped; and factory prepared liquid refreshments contained in sealed bottles or cartons. The size of this type of kiosk need not exceed 60 sq.ft. and a height of 8 ft. Toilets and wash-hand facilities must be available within a convenient distance.

In both the aforesaid cases not more than two persons may be employed, and vendees must be excluded.

A code of practice was prepared for the guidance of interested parties.

PROSECUTIONS

Code Contravened	Admitted Guilt	Found Guilty	Fine	Remarks
Public Health By-laws				
Fowl kept in living quarters	1		5.00	
Defective sanitary fitments	2		20.00	
Unclean conditions	4	2	80.00	One case R20.00 or 20 days (½ suspended) One case R20.00 or 20 days.
Fly Breeding	6	2	90.00	Two cases Not Guilty One case 4R10.00 or 10 days. One case R10.00 or 20 days suspended for 1 year.
Structural Defects	14	2	195.00	One case R30.00 or 1 month suspended. One case R10.00 or 10 days.
Defective Drainage	5		37.50	
Absence of Drainage	4		27.50	
Inadequate Ventilation	2		15.00	
Absence of Refuse Bins		1	5.00	Or 10 days suspended for 1 year.
Slaughter of Animals	1		10.00	
Privy where sewer available	1	3	35.00	One case R20.00 or 20 days suspended Two cases R5.00 or 5 days.
Absence of Sanitary Accommodation	1		10.00	
Pigs kept without permit	1		20.00	
Food By-laws				
Absence of Hot Water Supply		1	5.00	Or 7 days One case found not guilty.
Unclean conditions	16	5	200.00	Two cases R10.00 or 10 days. * One case R10.00 or 10 days suspended for 1 year (2 counts treated as one). One case R20.00 or 20 days.
Improper cleansing of utensils etc.	1		10.00	
Unsatisfactory Plant, Equipment and Utensils.	3		20.00	
Defective Refrigeration	1		5.00	
Exposure to contamination	7	2	80.00	* One case R10.00 or 10 days
Unsound Food		1	15.00	
Food Room used as Sleeping Apartment	1		5.00	
Meat conveyed in unauthorised Vehicle	2		10.00	
Bread conveyed in unauthorised Vehicle	1	1	20.00	
Person conveyed in Rear of Bread Van	3		30.00	
Absence of Towels, Nail Brush and Soap	2		25.00	
Absence of Protective Clothing	2	1	30.00	One case R5.00 or 7 days.
Absence of/Inadequate Refuse Receptacles	2		15.00	
Laundry By-laws				
Laundry conveyed in Unauthorised Vehicle	1		10.00	

Code Contravened	Admitted Guilt	Found Guilty	Fine	Remarks
Milk By-laws				
Sale of Cream obtained from Unregistered Source	1		10.00	
Sale of Unwrapped Ice-cream	1		10.00	
Absence of Refrigeration	4		30.00	
Introduction of Cream from Unregistered Source	1		10.00	
Milk not pasteurised		1	30.00	
Milk below Bacterial Standard	3		30.00	
Building By-laws				
Unauthorised Housing		1	10.00	Or 10 days suspended for 1 year
Slum Zone Regulations				
Absence of Drainage	1		10.00	
Unclean conditions	4	2	60.00	Two cases R10.00 or 10 days
Structural Defects	4	5	155.00	One case cautioned and discharged. One case R5.00 or 5 days. Three accused fined R30.00 suspended.
Absence of Refuse Receptacles	2		15.00	
Mosquito Regulations				
Failure to Prevent Breeding	1		10.00	
Food, Drugs and Disinfectants Regulations				
Preservative in Minced Meat	8	1	180.00	One case R30.00 or 30 days.
Excess Preservative in Sausages	6	1	100.00	One case R30.00 or 30 days.
Milk below Chemical Standard	1		10.00	
Honey (Excess Sucrose, etc.)	3	1	30.00	One case cautioned and discharged.
Public Health Act				
Food Exposed to Contamination	2		20.00	
Sale of Unsound Foodstuffs	2		20.00	
Regulations re Unsound Foodstuffs				
Sale of Unsound Container				Not guilty – 1 case.
TOTALS	128	33	1770.00	

XVI HEALTH EDUCATION

Elsewhere in this Report mention is made of the vital importance of instruction of the public in the preventive aspects of rabies .As in this so in many other crises, small or large. An informed public is an asset to the health of any community.

Through the medium of the press and the radio considerable space and time have been devoted to health matters. Much of this is quoted from reports submitted by the Medical Officer of Health to the various committees of the City Council. In other instances authoritative statements have been made directly to the Press and Radio South Africa by the City Medical Officer of Health. Under special circumstances the assistance of His Worship the Mayor or the Chairman of the Public Health Committee has been enlisted. Tribute must be paid to the various sections of the Press and to the radio authorities for their very ready co-operation, and their commendable attention to accuracy in their publicity of health matters.

With the consent of the Chairman of the Public Health Committee the Medical Officer of Health broadcast a message on the polio immunisation campaign in Afrikaans during the height of that campaign. Addresses on health subjects have been delivered to various public bodies by senior members of the Department.

In the more circumscribed field of education of health personnel, members of the Department have played their full part. Among lecture courses given by the staff were the following –

(i) Public Health Administration – University of Natal
– City Medical Officer of Health

(ii) Public Health Inspectors – Part II
– Assistant Medical Officer of Health and others.

(iii) Health Visitors Certificate – Deputy City Medical Officer of Health and others.

Health Education Section

Once again this arm has proved its great value to the Department. There follows a report by the Health Educator. It is notable for the way in which it illustrates the essential pre-requisite for any health education programme - an understanding of the background and idiom of the particular section of the community which it is proposed to enlighten.

1. DECIMALISATION OF CURRENCY

There we were with the dews of the New Year fresh upon us and the prophets in the section already saying ``I told you so''. It had become our by-word that as soon as the old year slips behind the curtain of nevermore, some out of the way task unexpectedly rears its insistent head.

The arch of the year 1961 vaults a strange span - from decimal in January to dogs in December, from rand to rabies.

When told they must lecture on the new decimal coinage the bewildered non-European staff queried ``But why us?'' Who could resist reminding them that ``there are more things in earth and heaven than are dreamt of in your philosophy'' and that Health Educatioh at its vibrant centre connects with the manifold way of life of the people?

They agreed that the Bantu everywhere were deeply worried about the new coinage. By hut fire, by compound primus stoves preparing their meals, in beer halls and homes, even in the loftier walks of teaching, the thought of the new mintage darkened their sky as the armies of locusts in former days darkened the noonday blaze. ``We shall surely be cheated as we were in war days by our own non-European shopkeepers'' – ``we shall be given wrong change'' – ``we don't know whether the New Year will produce a cow or a bull'' was how they expressed themselves. That 80 cents represented 8/- overwhelmed them with the thought of weight and quantity. One man said ``Both pockets will be full and the rest must go in my hat and the tsotsis will pick my pockets'' – and the final bogey – ``and how are we going to learn all this decimal story?''

It was considered that the Health Education lecturers were eminently fitted to instruct their people in decimal conversion. They themselves listened while European experts both in the department and in the City Treasury expounded the intricacies of the new system. In turn they practised on blackboards within the section. Then came the great test for them when the departmental Bantu were assembled for instruction. They were a mixed group, the graded educated staff and labourers. We looked at an old garden-sweeper hoisted precariously on an unaccustomed desk: poor Madhlala, he will have a hard time burrowing through this problem, we thought. What a picture of unwonted concentration those men were – furrowed brows, anxious eyes, bodies forward bent as though thereby they might grasp the secret more readily – and silence, silence so deep that it spoke, broken only by the voice of the lecturer and the soft scraping of the chalk on the blackboard. No foot shuffled, no one coughed, the stillness was vocal in its hush. Then came the surprise. The clear grasp and intelligent questions of the illiterate were astonishing and when Madhlala the old gardener put up his hand we held our breath, certain he hadn't a clue – but he answered correctly and with a thankful sigh we knew our fears had been but a mirage. We had forgotten the long ago when old unlettered women of the kraal had first learnt by devious ways accurately to count up those new pounds and pence – neither would rand and cents be a deterrent to them either.

Arrangements were made for lectures to be given to Africans employed by the Municipality-to gangs employed by the City Engineer and numbering 949 distributed throughout the City and to the Bantu staff of the Electricity Department and also to certain Indian employees. These classes were most successful but what would happen on pay-day? To avoid misunderstanding African staff accompanied every Paymaster to African employees throughout the region, one route lying through a Bantu reserve miles away where the City's pipe line lay.

Off-stage accounts of incidents were amusing but sufficed to show lecturers had been of valuable assistance. At one far-flung centre rumours of dishonest practice at local stores preceded the Paymaster and the labourers called ``don't come here with that new money''. The seasoned lecturer advanced toward them, slowly turned his back and completely ignored them. after a silence he called over his shoulder ``I don't know where you people have come from but it is not customary amongst us to bawl and shout but to elect one speaker to present the case'' – they recognised this traditional behaviour and immediately the atmosphere changed. Elsewhere a large group were wrathful and threatening a strike because overtime had inadvertently not been included in the pay packet. The lecturer by diplomatic parleying quelled the trouble while the Chief Paymaster was contacted by radio. Assurance of early adjustment was quickly forthcoming. These versatile African lecturers continue to justify the department's policy of selected, well trained men, and their own final comment shows they too were not without discernment. With the deep simplicity of men unaware they are saying anything unusual they remarked ``when at the end of each day we said goodbye to those paymasters, we felt we had worked with gentlemen and were saying goodbye to friends'' adding ``and how they work, Hau.''

Thus to the clinking of coins we began the year's work as we ended it to the barking of dogs pitched on every note of the canine octave.

2. RABIES

When rabies began to creep nearer our borders the Department took the public into its confidence. By radio and press they were made fully aware of the ramifications of the disease and the precautions and preventive measures to be taken. But for the Bantu, Asiatic and Coloured communities an intensive campaign of health education was instituted in order to:

(a) receive their full co-operation; and
(b) ensure that the campaign should not be viewed casually as another ``new something of the white people''

Bantu

In some Bantu areas the people asked in all seriousness "is this a crafty move on the part of Europeans to get rid of our dogs? Are Europeans' dogs also being treated in the same way— chained up meanwhile and later inoculated?"

The actual campaign consisted of :

(a) **Preparation of Lecturers:**

These were first given a session on rabies by a medical officer with discussion following.

(b) **Preparation of non-European public:**

Following a full explanation of the disease and how it is spread, it was announced over loudspeaker vans throughout all areas that for those who wished to dispose of dogs because they had too many, or they were sick, old or useless the S.P.C.A. would, on the morrow, follow on the heels of the health education vans. Seasoned lecturers as the Bantu staff are, they knew that while they must tell the full truth of the story, they must do so with a soft pedal, lest unreasoning fear which sits closely over against the heart of the muntu, be he rural or urban, lest that fear take over.

Bantu Stricken with Unreasoning Fear

The Bantu were stunned - that was the first reaction, stunned by the fact that dogs could could bite them with such terrible results! This was a new thing, a horrible thing. They began looking at their dogs with suspicion - the other mammals they were told of, such as wild cats, were, as far as they were concerned, in a far country, but their dogs! This creature at my feet: this dog I hunt with This animal that warns me when the skelms are near! There, in the security and peace of their townships, with? if needed, every means of help at their disposal they stood, a community suddenly changed. In the twinkling of an eye fear, stark, ruthless, unreasoning was in the saddle and galloping away with them. One man shouted "I will hang my dogs"....another called "take mine away, anywhere quickly". A teacher said "come to my house and take away this thing, I will not have it near me". Those who said they would keep their dogs were threatened; "to keep a dog" as staff said "was like stepping on the tail of a mamba". We, standing by, marvelled. Emotions of the Bantu are violent; for a small thing they may burn down a neighbour's hut. This violent sudden fear of dogs could evoke a mood which might transform otherwise peaceful Bantu into those who mutilate, kill and burn. As we stood watching, pondering this wild fear, we saw them in retrospect against their not remote background. We saw the family kraal on the hill and the cattle in the river valley. The fire outside the hut over which the pots were gently sizzling, and the large kamba of beer in the shade of the hut, all wrapped round in a peace which could suddenly be pierced with panic by the fear of such a simple thing as a "smell". If a native on a pathway should catch the smell of beer grain where it could not possibly be, he would be sure it meant the "imikovu" was there (legendary being with evil intent whose eye causes death, dumbness or insanity). If while walking in the bush he smells the odour of potatoes (amatabolo indigenous vegetable) roasting in the fire, he knows a leopard or a mamba is near to attack him, and if a tekwane should be seen on the hut thatch there would be misery in the extreme, for disaster and death were about to fall on that hut. Even an innocent buck crossing the path of one setting forth on a mission is a forecast of doom and his fear proverbially is described as "uhlatshwe ingebe" (the bone of the sternum greatly trembles and the whole body shakes).

Small wonder that now in their shacks and townships at this new threat the age-old terror should surge upwards to their very throats. An unconsidered word from the lecturers at that moment could have let loose a wave of disaster, but they were bone of their bone, flesh of their flesh, and with their own inherent fear in control, disciplined and in perspective knew well how to turn aside the rising tide of violence and terror. Perhaps the greatest factor was that the Bantu staff had been "tried by them" over the years and found to be their friends with factual truth on their lips. With infinite patience the position was examined by the lecturers, fears analysed, the picture of the woes that, even now, they suffered in imagination corrected and the simple story of prevention and precaution retold. When the S.P.C.A. van ultimately came to collect dogs the lecturers were consultants, owners insisting on asking their advice! Thereafter many a doggy head was turned homeward with its tail wagging. There was also many a heart tug amongst those Europeans watching when dogs, deep in discernment, became distrait as they drew near the van - they seemed so at the mercy of humans, helpless, guiltless of harm, so frightened and suddenly so unwanted. Bantu lecturers minus any sentiment gaily helped to catch dogs by request of owners. Borrowing leashes from the S.P.C.A. they became dog-catchers and reported in high glee "we are no longer lecturers, we run round and round like little boys catching dogs!"

Strays

When Cato Manor shack dwellers were moved to kwaMashu a very large number of animals were abandoned, became ferocious and could not be caught. One ate two goats belonging to a resident, another devoured a litter of pigs. These uncatchables had to be left for the police to handle.

Immunisation

This was carried out by the Government Veterinary department in close liaison with this department's Veterinary Officer, Field Hygiene and this section. The non-Europeans' response was very good. On the part of the Indians in some areas the co-operation was magnificent. The time devoted to rabies was two months - November and December.

3. POLIOMYELITIS

This nation wide campaign to immunise the susceptible population against poliomyelitis took the large reef of 66 days out of the year's programme, consisting as it did of three periods:

1st round up	:	15th – 27th May	=	12 days
2nd round up	:	24th July – 5th August	=	12 days
3rd round up	:	5th – 16th September	=	12 days

Each of these periods covered two weeks for actual immunisation but teaching and preparatory programmes of health education for non-Europeans because of far-flung areas began ten days before each inaugural immunisation day and continued throughout the actual day.

The method employed included:

(a) Instructional talks beforehand;
(b) Tabloid talks the day before;
(c) Round-up on the day.

(a) **Instructional talks** stressed the handicap slant of the disease with its incapacitation for work, painting with bold shadows a quite grievous picture of lifelong affliction, then with equal emphasis illuminating the dark prospect with the offer of prevention through the only means - a sweet garnished with vaccine.

(b) **Tabloid talks** were crisp merely announcing venue, date, time and age groups.

(c) **Round-up on the day.** On the actual day lecturers were at close grip with the people amongst houses and shacks, strongly persuading the indolent and indifferent, the hesitant and fearful not to miss the dramatic moment of protection. Lecturers could often be seen striding down hill on along the highways with a crowd of children and mothers, describing themselves later as Pied Pipers.

Bantu

It was not a propitious moment to prepare the Bantu. They were at the time living under the dark threat of a three days' strike to coincide with Republic celebrations. Fear imprisoned them as they had been warned of dread reprisals by certain of their compatriots so that they wanted only the questionable safety of their shacks and homes. Lecturers had to match their methods to the mood of the moment: they turned their thoughts by idiomatic language to the pressing need of immunisation, its safety, its accessibility - "A good partridge runs crying to the place of safety (immunisation), the last one to run is showered with knobkerries" (disease). It worked and this proverb became the subject of much laughter and repartee. "Mother where are you going" called a lecturer to a hurrying woman thinking she was not heading for the clinic "Hau! YOU ask that - am I not a running partridge!"

Indians

Indian mothers with 8, 10 and more children often trudged miles to get their family immunised. One has often watched them with steadfast face and determined if tired tread surrounded by their little ones patiently plodding toward the clinic. One has heard again and again the echo of a leading Indian who once said "for pity's sake bring family planning to our people". But mother's face was less harassed than when the end of the journey meant a needle in the arm and crying children. The 1960 campaign with its sweet-without-tears had changed the largo of dragging feet to a tempo of happier beat.

Imperative Ingredient

To achieve success on such occasions there is one imperative ingredient - never let up the intesity of the campaign because of the comforting knowledge that every area has been fully covered with health education. All man power must be out on the field all the time, themselves kept from flagging by enthusiasm and encouragement at the home base, and the air must ring with the story in all zones all the time till the last clinic door is shut .There must be footmen teaching groups, loudhailer work on foot, loudspeaker van work and the public must catch fire from the zeal of the workers - zeal is contagious! And when the lecturers return to report and eagerly ask "how many were 'done' at such and such a clinic?", if there is failure in any region it must be charged to the inscrutable and unpredictable whims of the public - and not to staff. That failure nowhere reared its repressive head will be amply evident from accounts elsewhere in this report of the campaign.

Activity represented in statistics:

1st Round	Instructional Talks	Tabloid Talks		
BANTU	944	768		
ASIATIC	337	216	Total	2,265
2nd Round				
BANTU	487	648		
ASIATIC	398	257	Total	1,790
3rd Round				
BANTU	363	414		
ASIATIC	647	197		
* COLOURED	38	202	Total	1,861

* A Coloured trainee had just been appointed and covered the Coloured race which formerly were included amongst other non-European statistics.

Visual Aid for Memory

As an aid to memory where zones had to be visited some days before due date of immunisation, leaflets of brightly coloured paper were printed with date of appointment in large bold figures and distributed to non-Europeans. Lecturers observed many women with these reminders in their hands as they queued for their 'sweet'.

4. PUBLICISING OF MUNICIPAL DEVELOPMENT, ACTIVITIES, ETC.

The City Council considered that there was a need for bringing Municipal development and activities to the notice of residents and visitors because many important aspects of the work of the Corporation are taken for granted by the public generally. An excerpt from the committee report reads: "Appropriate measures designed to bring a more complete picture of Municipal activities to the notice of the public can have the following results:

(a) Greater satisfaction on the part of the public with the services rendered and paid for from the public purse.

(b) Less criticism of the Council.

(c) Greater satisfaction among the municipal staff and greater keenness to serve and "esprit de corps".

(d) Greater attraction of qualified and suitable staff to the municipal services.

All departments were requested to make a set of photographic slides each with a showing time of approximately 20 minutes with appropriate tape-recorded commentaries.

"The Invisible Guardian" was the title of the set of 79 colour transparencies which portrayed the story of the unceasing vigil of specialist public health personnel in order to ensure that the health of the community is safeguarded .... "Durban in its sub-tropical climate and multi-racial population could easily be anything but healthy. To keep such a City free from decimating epidemics and diseases calls for an unceasing vigil". The narrative script was recorded in our own 'studio' by two voices and interspersed with music. Other departments made use of the technician and studio for recording their departmental stories. These received great publicity some months later when they were screened daily at the Durban July Exhibition.

5. DURBAN JULY EXHIBITION 5th – 15th July 1961.

Of all the attractions in the large wool mart in which the exhibition was housed, the quiet dignity of the Durban Corporation booth made it one of the most impressive. In the midst of competitive noises and the ceaseless sound of moving feet like a tide at ebb and flow, its atmosphere was as a pool of quietness. Passers-by stood at gaze, held by the impressive witness of authority and tradition in the City's emblazoned coat of arms. Behind the 'triangle' was the little theatre in in which departmental colour transparencies were screened from opening till closing time. The public took a personal even inquisitive interest as it were in the 'goings-on' of the multifarious affairs which it takes to maintain a City in efficiency, health and beauty. "The Invisible Guardian", the health set, enjoyed great popularity and was amongst the first three favourites. It became a common practice for the public to remain in the cinema to wait the next show. The department's technician was in charge of all filming arrangements supported by helpers from other departments.

A feature of increasing importance and widening significance in health education activities is that of investigating circumstances surrounding a problem of health.

(6) SURVEYS AND INVESTIGATIONS

Non-European Investigations do not mean just asking questions and accepting the first or second answer at value. We have known a full day to be spent on one family before "the pod was torn apart and the beans exposed". If a European official has made a preliminary investigation even with an interpreter, it frequently means that the facts will be hidden, not in the pod, but way down under the earth!

The Bantu are naturally suspicious. So it must be race to race in this two way traffic: muntu to muntu (muntu is singular of Bantu - not a derogatory term), Indian to Indian. Traditional courtesies of Bantu custom are always observed, unhurried, while inquiries are made about the kraal, the family and their current history - this dalliance is a necessary precursor to the serious indaba which is to follow and takes the pattern like unto a man with a branch of a tree which he sets out to carve into a stick. He whittles and casts away, whittles and casts away till he gets to the wood which he knows has worth. The casting away of much verbiage by the investigator is, however, not enought: he must possess a 'nuance' enabling him to recognise when "the head (truth) of the animal goes one way and the neck (lies) the other way". And how sorely Bantu racial patience is needed when an investigator is faced with a woman who stares with obsidian gaze, mute, while the minutes and quarters and halves pass inexorably by!

(a) Municipal Breweries

Tuberculosis had been found amongst the non-European staff of two municipal breweries. Whence had it come? We did not need to throw the bones of the Isamgoma, nor consult the ancestral spirits - the glaring cause was so common in our experience in industry where Bantu men provide their own food. Like many others these had fallen into the pit of substituting the kamba of beer for food. Their overweening ambition was for cattle prestige, to be the possessor of a herd. Round the cooking pots, mostly containing mealie meal substances, they talked of the cattle they were purchasing and saving extra from the food they didn't buy. They dreamed of the time when their fine herd would be at the dipping tank and it would be said. "Hau! All these beasts belong to so and so - he is how a Mnumzaan indeed". They KNEW WELL what they were doing, they knew the old saying of the kraal "A good pool of water is one that has clay, in that kind of pool you don't sink" meaning after food (clay you don't sink if you take beer. But they did not know the insidious effects of inadequate food over a prolonged period.

After a series of talks and films, arrangements were made for one man to be appointed as buyer/cook for a group. The management gave him time to purchase meat and foods daily. The pots soon began to emit a savoury smell new to the precincts! Months later both branches were followed-up and the men found to be no longer cringing under the fear of a mysterious 'causeless' tuberculous infection. They were well fed and grateful for the light shed on the 'eating business' even if it meant less cattle at the dipping tank!

(b) Shangaan Babies versus Kwashiorkor

A request was received from a medical authority of Tara Hospital, Johannesburg to assist in assessing the following statements:

(Extract) :

> "Shangaan babies do not get malnutrition". Comment from Johannesburg:- This statement would seem to deserve study. It would seem the women spend much time with their children who are fed on mealie porridge as are babies of other tribal groups who DO develop malnutrition.
>
> "If malnutrition is in fact less amongst Shangaans, it would seem to be important to know the reasons. As the infant diet is the same in all tribal groups, could the lack of rejection as suffered by children of working mothers of other tribal groups be the significant factor?"

Several Shangaan families including a granny recently returned from Portuguese East Africa were interviewed by three Bantu lecturers. They were of the unanimous opinion after considerable investigation that:

(1) the lack of malnutrition in Shangaan babies is due to the fact that Shangaans are traditionally very food conscious and very good cooks, very much more so than Zulus, Xosas and Basutos.

(2) **Pregnant Women.** The Shangaan expectant mother is the object of communal care in the matter of feeding. They make almost a fetish of feeding her. Her food cravings and normal diet must be met at once at all times "because it is the child crying for the food". Her cravings, it is alleged, most often are for different types of meat, fish and fowl, as well as for greens. If none is available in her home the neighbours make it their business to supply it; she is never allowed to lack. This care continues while she breast feeds the child. Mealie meal porridge alternates with mabela porridge. Another popular diet of the expectant mother is a very bitter wild herb mixed with powdered monkey nuts and cooked till they are a puree. Zulu pregnant women, on the other hand, have no consideration whatsoever in the matter of food. Their cravings are ignored by the family and they have to get by the best way they can. Even if they crave amasi they are not necessarily given it and frequently resort to taking it secretly when possible. Shangaan infants are breast fed till six months. Mothers work only in the fields and take their babies with them so there is no foster parent and feeds are regular.

(3) **Infant Feeding – Shangaan.** At six months, supplementary food is introduced in the form of home-grown and ground mealie meal to which is added peanut powder. This powder is carefully ground from uncooked home grown peanuts. Increasingly as the child grows peanut powder is added to most dishes. In the part of the country where cows do not thrive it is used instead of milk with the mealie meal. Where, however, milk is plentiful it is always added to mealie meal for the six months old child.

A further supplementary for the six month old is home-grown brown rice well ground, mashed and mixed with fish powder made from home-cured fish.

Home-cured fish is a great feature of these people. Their rivers abound in large one-boned fish which form one of their staple foods. Shangaans cure other species of boney fish, the bones of which are stamped into a powder with the flesh.

At six months pumpkin tops also are given, with ground peanuts cooked for some time with the tops. Amasi is given, but as a drink not as a substitute for food.

As the child grows part of its regular diet consists of beans and samp well cooked to which is added both powdered peanuts and powdered fish. Samp is always most carefully prepared. Fish soup made from powdered fish is given to infants. All meat for adults except chicken is also cooked with ground nuts.

(4) The fact that children of other tribal groups who feed on mealie meal suffer from malnutrition does not necessarily mean it is due to rejection. Scores of kwashiorkor cases from rural areas in the King Edward VIII Hospital, Durban, are infants of mothers who do not work and are not separated from their mothers, many even are breast fed. But rural mothers especially are deplorably ignorant of the need for supplementary foods at four months and of the need to reinforce mealie meal and samp with protein - and of the need to increase both quantity as well as protein for the growing infant.

(5) It is found in the Bantu races here that a child separated from its mother in the care of a good guardian who has knowledge of feeding (say a nurse or teacher) by-passes malnutrition although under foster care. Often the reason why a "rejected" child develops malnutrition is due to gross neglect on the part of the one responsible for the feeds. These are not given regularly, nor are they properly prepared. Often the mother does not spend sufficient for the child to have the nutritious foods required. It is therefore considered that the down-to-earth reason for malnutrition too often is that the child is starved through ignorance and/or poverty rather than rejection. Shangaans, on the other hand are the most painstaking cooks and use traditional substances which are nourishing. There are many Shangaans working on the sugar farms of Zululand, and they are famed amongst Zulus for their "tasty" cooking, for the variety of their dishes for the long and careful preparation they put into their cooking, and for the feature that peanut powder is mixed with just about everything.

Regarding caterpillars used by adult Shangaans, it appears that only a section of the community use them and that they are seasonal.

It is alleged to be a custom among Shangaans to administer a vegetable herb in the diet of a child which prevents "runny tummies" and acts also as a "bile expeller". Does this mean there is no gastro-enteritis predisposing the child to malnutrition?

Zulu lecturers are astonished at and envious of the high nutritional standard of the Shangaans food as compared with their own monotonous and less nourishing diet.

(c) Municipal Abattoir

The Director of the Municipal Abattoir was troubled. The canteen was not being patronised. Was it, we wondered, because certain illegal meat vendors within and without the walls were intimidating Bantu staff? Was it because Bantu women selling foodstuffs at the gate had asked friends within to persuade staff still to buy from them? It could easily have been so. But the cause was simple. The good food was just not being cooked to suit Bantu taste. For instance the water in which samp was boiled was not allowed to boil slowly away, but the samp was strained off leaving it tasteless. Pieces of meat found thrown about the yard, had not been properly cooked. Lecturers advised as to how foodstuffs should be cooked and at the time of writing the Director of the Municipal Abattoir advises that the canteen has never looked back and is most popular.

(7) KWASHIORKOR

Model demonstrations from the loudspeaker van, visual aids on foot and loud hailer talks with visual aids all to combat kwashiorkor in the City numbered the following:

Note: All kwashiorkor teaching is three-fold and includes a talk with visual aid on gastro-enteritis and clean feeding bottles. There are also separate teaching sessions on gastro-enteritis with visual aids and demonstrations on washing of feeding bottles.

Kwashiorkor:	Model demonstrations in Cinema Van:	85 demonstrations to 4,608 Bantu
	Groups with visual aids and loud hailers:	120 talks to 2,083 Bantu

Gastro-enteritis:	Visual Aid from Cinema Van:	61 demonstrations to 5,737 Bantu
	Visual Aid with loudhailer:	575 demonstrations to 9,767 Bantu
	Bottle Washing Demonstrations in Cinema Van:	39 demonstrations to 1,471 Bantu

During a survey at King Edward VIII non-European hospital, 259 women who took their places over a period in a gastro-enteritis queue each had a session with a lecturer on clean feeding bottles, her own usually unclean utensil being used for the object lesson.

(8) ROUTINE WORK

In between the more spectacular work there proceeds systematic plodding misnamed routine. With the stories of vexed relationships and human problems brought to the workers almost daily on the field how could the work be routine? But whether from the Cinema van, loudhailer or footman the message must have a freshness, a captivating quality in its presentation which will transmute the oft heard theme into one of urgent personal concern to the listener. Such work is statistically recorded here of the three subjects which received major attention in the 'in between' times

TUBERCULOSIS

Visual Aid	Groups	347	talks to	6,583	listeners
	Van	115	"	5,006	"
Not Visual Aid	Groups	176	"	3,803	"
	Van	143	"	16,272	"

NUTRITION	Group	1,477	"	19,096	"
	Van	62	"	3,565	'''

BILHARZIA

Visual Aid	Groups	116	"	1,580	"
	Van	62	"	3,197	"

SCHOOLS
Sessions 49 on Bilharzia to 7,356 scholars
" 10" Typhoid " 1,212 "
" 38 " V.D. " 3,560 "

(9) VISITORS – WEST BERLIN : WEST GERMANY: HONG KONG.

Dr. Ingaborg Kemna, a senior health official from West Berlin spent a full aftemoon absorbed in models, -visual aids, films and asking many questions about non-European re-action to health teaching. "As I go about the country" she said "I am astounded at what the minority Europeans - Government, Municipality and social organisations are doing for the Bantu, and now here in Durban this wonderful equipment - why I have nothing like this in West Berlin. Even if I show a film it has to be borrowed". Then with a big sigh she said, "Your non-Europeans are more fortunate than my thousands of European mothers for whom I have no health education equipment," and she added "Your Bantu have more freedom than I."

West German Journalist.

Shortly after the above statement a woman journalist from West Germany said to us, "I expected to find terrible things in this country but the health services are wonderful, what the non-Europeans are receiving at the hands of the Whites astonishes me". "No", she replied to our question whether she would write a book on her return to Germany, "No, if I wrote what I think they would neither believe it nor publish it."

Hongkong Senior Health Official

This official of many years labour in Hong Kong gloried in the visual aids, demonstrations and techniques. She said "Well I've seen nothing like this anywhere, neither in Hong Kong nor in London". She was more than shocked at our Bantu illegitimacy problem which she said was non-existent in Hong Kong.

(10) ASIATICS HEALTH EDUCATION

Work amongst Indians is never dramatic nor explosive as amongst the Bantu. There is sure and steady cultivation of the Asiatic field year after year, the obscure corners are diligently tended as well as congested areas. Rewards are reaped in times of campaigns or emergencies when roads are swollen with the gaily coloured saris and dresses of the surging crowds eager for the needle, the sweet, the film instruction, or injection for the leashed dog.

Tribute must again be paid to the two lecturers who cover the population of 224,227 Asiatics.

In common with the Bantu they had their large share in rabies. a smaller one in decimal conversion and a full share in polio as recorded earlier in this report when the toil of two amounted to :–

Instructional Talks	–	1,382;	and
Tabloid Talks	–	670.	

So quickly written, simply stated, but those figures represent housing areas miles distant from each other as well as those heartbreakingly scattered shacks and homes on the periphery of the City where dusty highways and stony footpaths must be traversed.

Municipal Centres

Seven housing schemes and barracks had their share of attention –

176 group talks on all usual health subjects to 2,864 attendance.
82 loudspeaker talks " " " 4,332 "

Factories

When managers of factories looked through the viewer at coloured transparencies to be used as visual aids for their Indian staff they willingly gave 30 minutes extra for the purpose of V.D. instruction. There were 52 sessions to 2,358 employees. Men and women were taken separately. Suspects were found at most factories.

Schools

At five schools 22 sessions on bilharzia, tuberculosis, personal hygiene, and the transmission of disease were shown to 780 scholars. Special visual aid bilharzia lectures were given at two schools to 2,785 scholars. These are always warmly welcomed by Principals who usually send a letter of thanks with a request for a return visit.

With what was left of time was focussed mainly on :-

	Group Talks	Loudspeaker Talks
Diphtheria	106	138
Smallpox	94	133
Tuberculosis	86	78
Nutrition	94	12
V.D.	74	–
Rubbish Dumping	50	1

COLOUREDS HEALTH EDUCATION

A new branch was grafted on the Health Education tree when a Coloured male (37) was appointed in August to serve the Coloured population of 25,641. Hitherto Coloureds had been instructed, during campaigns, by Europeans and Indians and that chiefly in their attractive modern housing scheme where there is a flourishing Municipal Clinic.

The new worker knew nothing whatever about health education so we were presented with two obvious immediacies : –

(1) The exploration of the 'terrain' of Coloured life as represented in

- (a) Two housing schemes;
- (b) Shacks;
- (c) And in clusters scattered everywhere and quite unrecorded, many being in Indian and European back-yards.
- (d) The establishment of relationships with group leaders, school principals, social community life, etc.

and

(2) Training the new man in health subjects, their presentation and in public relations.

As to every pioneer there were stones on the path but they were only stones - not boulders.

(1) In housing schemes a very large proportion of the mothers were working, the children being in the care of servants or grannies. Special teaching to parents has to be at night.

(2) "Tussen Die Boom En Die Bas" (Between the Tree and the Bark) - that is precisely where he found himself amongst those, outside of recognised housing schemes. There was a frigid social reserve and unvoiced suggestion that it was something of a 'cheek' to think they needed teaching.

This front was dealt with graciously, tactfully but positively by countering, "I am commissioned to let you know the truth about certain health matters". Then would follow a talk on immunisation often only to uncover the fact that no child in the home had been protected against diphtheria nor maybe also against polio, and quite a few were unvaccinated against smallpox.

Already the atmosphere has greatly changed, truth is having its way.

To fathom the needs of a shack community a survey was made - hereunder is the worker's abridged report –

> "I have canvassed the area thoroughly. The people, I think did their best to volunteer information. Most of them are unemployed and pathetically poor. Here are the circumstances of a few :-
>
> Mr. and Miss R. (brother and sister) elderly and destitute. No income. The sister is mentally deranged.
>
> Mr. O., an ex-soldier, military pensioner with four sons, three unemployed, one discharged from T.B. hospital but not declared fit for work.
>
> Mr. P. living with an African woman, four children, and she is the sole support through her washing. He is very crippled with arthritis, unable to work. The shack of one room has no door, portion of wall is merely hessian, floor of sand.
>
> The dominant factor is unemployment. Almost 95% are unemployed.
>
> Cohabitation and illegitimacy is the most tragic factor in this area, and I have my doubts about some who claimed they were married. I calculate 60% of mothers are unmarried.
>
> There is an undercurrent of despair amongst these people, in some cases they are resigned but in others there is sullen resentment.
>
> They need health teaching on just about everything."

N.B. The above shacks are about to be demolished - some of those who have since found employment will qualify for the housing scheme being built at Merebank, but the remnants will be moved to controlled shack zones.

During the first five months of his training the new worker's most effectual work was amongst factory employees, the subject venereal disease. At one establishment 450 girls gave unwavering attention to the lunch hour talk, the lady supervisor as well as the girls expressing sincere gratitude and asking for a return health instructional visit.

39 Factories – 56 Talks. Attendances 4,149

Schools

At 11 Coloured schools, 39 talks were given and 104 film shows put on to 5,985 children in all. The subjects were:

bilharzia, hookworm, food hygiene, transmission of disease, and insects in relation to disease.

At the Coloured Training College for Teachers, venereal disease was the subject.

Un-Immunized

In a month's analysis of three widely removed clusters of Coloureds, there were found 62 not immunized against diphtheria and 67 unvaccinated.

"Have you Subtracted your Day Well?"

When the day's work is done and they are wending homeward, the Africans in northern Nigeria salute each other with the greeting "Have you subtracted your day well?" (Has it gone well? Has your labour been fruitful?)

At the last sunset of the year we paused to ask ourselves that question.

Came back to us the memory of many occasions when we saw new health knowledge as a piece of yeast leavening the lives of those to whom we give our days:-

He was an old heathen just from Pondoland listening intently to the story of T.B. illustrated by a visual aid. The lecturer told of how a man caused his own death by failing to follow faithfully the instructions of the doctors regarding attending clinic regularly for fresh supplies of drugs and injections and for X-Ray re-check. Instead, he said he was feeling well, and went home to the kraal. When inevitably his relapse occurred he wasted much time with the witchdoctor and died there ... The old Pondo crept very quietly up to the lecturer and whispered in awe "Did he go to the Old Man with the very long beard?" (Very long beard is a sign of great age - the phrase meaning God). His idiom implied what a fool to go before he needed to - the old Pondo had got the teaching.

The environmental setting of the Bantu township favoured bilharzia. Diagrams of the cycle of the parasite were used for teaching. Days later a follow-up lecturer was sent to ascertain if the story had gone home. On foot and meeting a group of women he inquired if they had heard anything from a van on such a day? "Oh, Yes". "Can anyone tell me about it, I too want to know". In reply a woman stooped to pick up a twig, then squatting on the ground she limned in the dust a facsimile of the diagram used and explained the story, not omitting any salient point . and she was unlettered.

Many such memories flock to our minds like birds at homing time as this long day closes - and we are encouraged.

XVII MATERNAL AND HEALTH

MATERNAL HEALTH:

This Department does not provide a district midwifery service or maintain accommodation for maternity cases. These functions were discontinued in 1937 when the Provincial Administration extended its activities to embrace these functions..

District midwifery services are provided by the following institutions –

European:	Addington Hospital (Provincial);	Mothers' Hospital
Coloured:	Addington Hospital (Porvincial);	McCord's Zulu Hospital
Asiatic:	McCord Zulu Hospital	King Edward VIII Hospital (Provincial)
Bantu:	McCord Zulu Hospital	

Ante-Natal Clinics

Ante-natal clinics are provided for European, Coloured and Asiatic mothers who do not intend to go to hospital or call a medical practitioner for their confinement. They are maintained by this Department primarily for the control of midwives.

The following sets out the work performed –

	E	C	B	A	Total
No. of Ante-natal Clinics	12	12	44	99	167
Total attendances of expectant mothers	75	19	317	3579	3990
No. of Ante-natal Visits	90	34	247	598	969
No. of Post-natal Visits	8	7	43	1008	1066

(Report by Part-time Medical Specialist in charge of Ante-Natal Clinics (Dr. L. Raftery, F.R.C.O.G., M.M.S.A., M.R.C.S., L.R.C.P.))

> "The last year has been a progressive one in the ante natal clinics. The attendance continues to be very good at the Indian clinics at Brook Street, and the attendances at the European and Coloured clinics have increased.
>
> The Durban domiciliary midwives send many cases for opinion and advice and there appears to be a very cordial relationship between these midwives and the Health visitors.
>
> With regard to our Indian expectant mothers, one feels that their confidence is growing more in the ante natal services rendered by the Corporation. This is due in large part to the kind and efficient attention of the Health visitors and the auxiliary Health workers. It is also due to the fact that since we have been able to make use of the Spencer Haemoglobinometer to assess more accurately the degree of anaemia, so commonly present in these mothers, we have been able to impress on them the urgent need for treatment, and after treatment, they feel so much better in health that each one helps the next mother to accept our advice. Many of the mothers have needed to be sent to hospital, but since we have been able to prescribe folic acid and ferrous sulphate tablets from the clinics, we have been able to treat the more moderately anaemic women without needing to refer them to hospital. The earlier in their pregnancies that these women can be persuaded to come to the clinic, the greater is our opportunity to correct their anaemias in time for their safety in their deliveries.

By virtue of these iron tablets we are also enabled to maintain the improvement in the blood conditions of these patients who have had to be referred to hospital for transfusion, and are thereafter returned to our clinics.

Some idea of the problem of anaemia in our Indian expectant mothers can be gauged by the following figures:-

From January to December 1961 - 6% of the mothers had a haemoglobin level of 30-45%. 12% had haemoglobin level of 50-55%. 32% had a haemoglobin level of 60-65%. 37% had a level of 70-75% and only 13% had a normal level of 80% to 100%.

This means that half of the 2300 Indian women who attend our 1961 clinics were grossly anaemic having less than half the normal blood requirements. It is a real pleasure to see these women, after treatment, losing their pallor, listlessness, giddiness and inability to undertake their household duties and to know that their confinements are being rendered so much more safe.

One aspect of the work which has increased at these clinics is the clerical work involved in writing the necessary letters of reference to hospitals and doctors and in keeping the necessary records of patients referred for treatment. The health auxiliaries are being trained splendidly by the Health Visitors to assist me in this time consuming task. With this help I am able to concentrate fully on the real problems that are encountered in our busy and well attended clinics.

Although I have already, in previous reports, given credit to the personnel of these clinics, I must again repeat my praise of the efficient organization, from the level of the Chief Health Visitor to the most junior health auxiliary.

Our building at Brook Street is old, facilities are often limited, the attendances are large, the time available is not long, but each member of the team is constantly employed in efficient work in an atmosphere that is always one of happy helpfulness.''

Supervision of Midwives

A Health Visitor supervises the work of the midwives in private practice and investigates any cases of still-birth, puerperal sepsis and ophthalmia neonatorum which might occur in their practices.

There are in Durban only a handful of trained Indian midwives. This Department therefore has had to permit uncertificated Indian women, who have undergone a limited training by the Department to practice, but only under strict supervision. The routine procedure is for these women to bring all their prospective mothers to the ante-natal clinic before they can accept them.

In 1957 there were 125 uncertified Indian midwives on the Department's List, but the figure has now been reduced to 105, as 20 midwives have ceased to practice.

Set out below are details of the numbers of births attended by midwives only, as compared with the number of midwives on the list kept by the local authority.

	E	C	B	A	Total
Registered midwives	6	3	1	–	10
Unregistered midwives	1	3	1	105	110

No. of Confinements attended by Midwives

Race	Registered Midwives	Unregistered Midwives	Total
European	215		

No. of Confinements attended by Midwives

Race	Registered Midwives	Unregistered Midwives	Total
European	215	2	217
Coloured	224	19	243
Bantu	324	44	368
Asiatic	1,283	2,066	3,349
Total	2,046	2,131	4,177

CHILD HEALTH

The child health clinics, which are held in various parts of the City were curtailed during the poliomyelitis immunisation campaign. In spite of this, however, the total attendances were considerably higher than those of previous years. The primary function of the service is advisory and educational; and to prevent disease and promote a condition of positive health. Treatment of minor ailments is of necessity carried out, particularly in the non-European sections.

There has been a marked expansion in these services during 1961, as shown by the establishment of four new clinics and the extension of the clinic sessions at two existing clinics:

Lamontville Clinic:

With the closing down of the Institute of Family and Community Health on 31st January, 1961, arrangements were made to conduct a child health clinic in a vacant office of the Bantu Administration Department. This clinic was commenced in February, and serves the mothers and babies living in the Lamontville area.

Rydalvale Clinic, kwaMashu:

Owing to the further expansion of kwaMashu, it became necessary to establish an additional clinic in the newly developed area.

A vacant cottage at Rydalvale was repaired and converted into clinic premises. The clinic was run on a weekly basis, but it soon became necessary to increase the sessions to four days a week.

Chatsworth Clinic

After the incorporation of Chatsworth into the Municipal area, it became necessary to supply a mother and baby clinic for residents in the area. It was impossible, at short notice, to find suitable premises, so the immunisation van was made use of as a temporary mobile clinic. It is hoped that suitable premises will be found in the near future.

Merebank Clinic:

Until February 1961 the Child Health services in the Asiatic Housing Scheme at Merebank were catered for by the Institute of Family and Community of Health.

A piece of land in the centre of the Housing Scheme has been allocated, and plans for a suitable clinic have been prepared. This will be the first clinic in the City which will be purpose designed.

Pending the building of new premises a clinic has been conducted in the Presbyterian Church on Mondays and Fridays. The premises are small and all equipment with the exception of chairs has to be taken from Gale Street.

Mayville Clinic:

This Clinic was established in 1947, and served the European, Coloured and Asiatic mothers and babies living in the Toll Gate/Mayville area.

In July 1961, the City Engineer advised that resiting of the clinic was necesaary as it lay in the proposed line of urgent highway construction. Several sites were inspected and it was finally decided to transfer the clinic to a portion of a park area situated at the corner of Kenilworth and Brickfield Roads, where it would be suitably sited for the Coloureds and Asiatics.

As there were no suitable sites in the European area, arrangements were made to use the basement of the Tennis Stadium for clinic purposes, and this has proved satisfactory as a temporary measure.

Bacus Road Clinic, Clairwood:

This clinic, which was held on the basis of one morning session per week became very congested by the enormously increased number of attendances during the year. In January it became necessary to conduct an all-day weekly session, but arrangements are in hand to extend the services to a bi-weekly clinic.

Set out below are the total attendances at this clinic for years 1960 and 1961.

	1960	1961
January	1,115	1,912
February	1,653	2,702
March	1,272	2,120
April	1,337	2,214
May	1,303	2,035
June	1,730	2,320
July	1,812	2,287
August	1,824	2,423
September	1,561	3,003
October	1,274	2,369
November	1,310	1,981
December	1,824	2,102
Total	18,037	27.468

Brook Street Clinic:

On the 8th December, 1960, the Public Health Committee approved in principle of a proposal to convert the old Police Station premises in Lancers Road to serve as a non-European Child Health Clinic as an alternative to the present premises at Brook Street. This proposal came about because the existing clinic is in a bad state of disrepair, and the area in which the present clinic is situated is most unsatisfactory.

Plans have been submitted for the necessary alteration of the old Police Station, in Lancers Road.

Proposed New Clinics:

During the course of the year several sites have been inspected with the view of extending the clinic services in the City. Additional clinics are needed in the following areas –

Clare Estate	for	Asiatics
Sydenham	for	Asiatics
kwaMashu	for	Bantu
Manor Gardens	for	Europeans

Feeding Schemes:

One of the highlights at the Child Health Clinics during the year was the vast increase in the amount of milk and other infant foods available for distribution to the under-nourished infants of all races.

This assistance was made possible through the following organisations :-

(1) Feed the Babies Fund
(2) Malnutrition Relief Committee
(3) Government Pilot Feeding Scheme

(1) Feed the Babies Fund.

In January the Chairman of the above Fund notified the Department that the Fund was prepared to supply "Pro-Nutro", a high protein food supplement, for distribution to needy pre-school children. 2 ozs. of Pro-Nutro per day is sufficient, it is estimated, to assist materially in preventing malnutrition.

To commence the scheme the following quantities of Pro-Nutro were made available:

For 200 toddlers at the Merebank Clinic	: 800 lbs. per month
For 130 toddlers at the Lamont Clinic	: 520 lbs. per month
For 100 toddlers at the Clairwood Clinic	: 400 lbs. per month
For 100 toddlers at the Cato Manor Clinic	: 400 lbs. per month.

It was agreed that where a mother could afford to pay, 4 cents a pound would be charged, but if indigent she would be given a free issue.

The introduction of Pro-Nutro has been a great boon to the poorer families, as it is a tasty, quick to prepare foodstuff, and the toddlers who have taken it regularly have gained weight, and improved in appearance.

(2) Malnutrition Relief Committee.

In February 1961 advice was received from the above Committee that they were prepared to supply to the Department dried milk for the poorer families attending the Child Health Clinics.

It was felt that the mothers should make some small contribution for the dried milk, and it was decided to charge 10 cents per pound for Full Cream Powdered Milk and 5 cents per pound for the Skimmed Powdered Milk.

To commence the scheme the following dried milk was ordered –

Cato Manor Clinic	50 lb. Full Cream Powdered Milk per month
	50 lbs. Skimmed Milk Powder per month
kwaMashu	275 lbs. Full Cream Powdered Milk per month
	200 lbs. Skimmed Milk Powder per month.

The mothers at the above clinics were very grateful that they were able to obtain milk powder for their babies, and attended regularly for the supplies.

Demonstrations were given to all the mothers on how to make the feeds and how to store the food and feeding utensils to avoid contamination.

By June 1961 nine further clinics were receiving powdered milk.

Bantu Clinics	Umlazi Glebeland	200 lbs. per month
	Chesterville	100 lbs. "
	Lamont	120 lbs. "
	Brook Street Clinic	50 lbs. "
Asiatic Clinics	Mayville Clinic	300 lbs. "
	Brook Street Clinic	50 lbs. "
Coloured Clinics	Mayville Clinic	200 lbs. "
	Sparks Estate	200 lbs. "
	Gale Street Clinic	200 lbs. "

In August this allocation of dried milk was extended to the indigent European families.

(3) Government Pilot Feeding Scheme:

On the 4th May 1961 the Minister of Health stated that he was considering the introduction of a pilot scheme to supply skimmed powdered milk at a subsidised price of 14 cents per lb. to Bantu children in an attempt to combat kwashiorkor. He stated that Durban had been one of the areas selected for the introduction of the scheme for a six months' period.

The scheme envisaged the distribution of the milk to children up to the age of 5 years. It was required further that 5 cents per pound should be recovered from those who could afford that sum.

As 2 ozs. of dried skimmed milk per day has been estimated to be effective in preventing a child from developing kwashiorkor, 1 pound per week was allocated to each recipient.

On 30th October the City Council agreed to participate in the pilot scheme, and distribution commenced on Friday, 17th November at the two Child Health Clinics at kwaMashu.

Initially the mothers were a little reluctant to participate in the scheme, but they soon realised its value when their children began to gain weight and their general condition improved.

A careful check on each child's progress was carried out so as to enable the Department to report fully on the effects of the scheme at the end of the trial period.

Clinical Medical Officer's Report

The Senior Clinical Medical Officer, Dr. H.A.B. Pletts, comments as follows:

> "The year has seen the very welcome addition to the medical staff of two part-time medical officers. Dr. E. McDonald and Dr. G. Gregerson from December 4th and December 18th respectively. This will enable several more clinics to be visited regularly by a doctor, and relieve the Health Visitors concerned of untoward responsibilities in the assessment of illness or injury. It will also serve to co-ordinate more closely the immunological procedures, and feeding and hygiene advice in the various clinics.
>
> The outlook for 1962 would seem to be a much improved one for child health, as advances made in housing, clinic facilities with medical supervision, state of immunisation, and a realistic attempt at combating one of the greatest problems of malnutrition can scarcely go unrewarded.
>
> As in past years, thanks are due to the Health Visitors and clerical staff for their untiring patience, work and courtesy."

HOME VISITING:

Although home visiting was curtailed during the three poliomyelitis campaigns, its importance was not lost sight of. All mothers who had not had a doctor in attendance for their confinements were visited soon after discharge from hospital or when the midwife had terminated her attendance in the home.

Among other visits were those babies, who needed a mid-week check between clinic attendances.

Home visiting at kwaMashu has increased during the year and amongst other things the Bantu Health Visitors demonstrated to the mothers how to prepare the infant feeds and clean the feeding utensils.

The following home visits were conducted during the year :-

	E	C	B	A	Total
First Vists	2,167	1,004	2,717	7,668	13,556
Re-visits	5,740	768	782	4,943	12,237

NURSERY SCHOOLS, CRECHES, PLAY CENTRES:

In order to effect registration of the above institutions in terms of the Children's (Amendment) Act it became necessary that these institutions be furnished with a certificate from the local authority to the effect that the particular institution complied with the necessary regulations.

During the year a number of centres were inspected and reported on for this purpose.

CENTENARY: ADDINGTON HOSPITAL:

The City Health Department was requested to stage an exhibit at the Addington Hospital during their Centenary Week.

The exhibit included a considerable amount of photographic material depicting "The Duties of a Health Visitor" and other subjects chosen for exhibiting were "Play and Playthings suitable for the Various Age Groups"; "Feeding Bottles through the Ages"; and "Care of the Feet and Suitable Shoes and Socks". Great interest was shown in the various sections and the exhibit was well attended.

MOTHERCRAFT SCHOLARSHIP:

To mark the Centenary of Addington Hospital the City Council decided to award an annual grant of R100 to a nurse trained at Addington Hospital to assist her to undertake the Mothercraft training at an institution approved by the Mayor.

The grant is known as the "Addington Hospital Bursary". The candidate will be nominated by the Mayor after consultation with the City Medical Officer of Health and the Matron of the Hospital.

MEDAL AWARDS TO STUDENT NURSES:

Since 1957 it has been the policy of the City Council to pay tribute to the nursing profession by awarding two medals each year to the most outstanding nurses in training at Addington Hospital.

In 1960 the City Council decided to extend these awards by presenting annually fob watches to the other training hospitals in the City.

The following were the awards for 1961 –

Addington Hospital		
Gold Medal	:	Nurse S.M. Jeanes
Silver Medal	:	Nurse M.C.J. Sauvage
St. Augustine's Hospital		
Stainless Steel Fob Watch	:	Sister Mary Michael
Entabeni Hospital		
Rolled Gold Fob Watch	:	Nurse M.B. Lippan
Stainless Steel Fob Watch	:	Nurse H. Fletcher
St. Aidan's Hospital		
Stainless Steel Fob Watch	:	Nurse R.F. Papia
King Edward VIII Hospital		
Rolled Gold Fob Watch	:	Nurse M. Kayana
Stainless Steel Fob Watch	:	Nurse M. Seitshina
McCord Zulu Hospital		
Stainless Steel Fob Watch	:	Nurse G. Sonjica

Supervision of Midwives January - December 1961.

No. of Registered and Unregistered Midwives on List (Private practising in Durban)

	E	C	B	A	Total
Registered	6	3	1	–	10
Unregistered	1	3	1	105	110
No. of midwives who have ceased to practic	5	1			6
No. of untrained midwives who have ceased to practise				5	5
No. of trained midwives deceased	-	-	-	-	-
No. of untrained midwives deceased	-	-	-	4	4
No. of women practising midwifery who have been warned not to do so unless they apply to have their names put on the list	-	-	-	7	7
No. of midwives prosecuted	-	-	-	-	-
No. of difficult cases attended to and delivered	-	-	-	1	1
No. of midwives put on list during the year	1	-	-	-	1
No. of midwives re-instated during the year	-	-	-	-	-
No. of midwives appliances examined	16	19	47	996	1078
No. of midwives bags replenished	-	65	30	2330	2425
No. of midwives dressings sterilized	-	59	-	2016	2075
No. of midwives dressings sterilized after septic cases	-	-	-	-	-
No. of visits to midwives at their homes or at patients houses	2	3	13	287	305
No. of midwives who were warned for failing to comply with regulations	-	-	-	6	6

Certificated and uncertificated European and Coloured midwives appliances and registers are examined every three months uncertificated practising Indian midwives appliances are examined every month

Health Visitors Work January - December 1961

First Visits Feeding	Breast	889	635	669	2982	5175
	Mixed	141	26	202	434	803
	Artificial	609	12	110	481	1212
		1639	673	981	3897	7190
Re-Visits Feeding	Breast	344	13	141	998	1496
	Mixed	389	27	74	665	1155
	Artificial	1627	34	88	734	2483
		2360	74	303	2397	5144
Older Children	First Visit	528	331	1736	3771	6366
	Re-Visit	3384	694	479	2546	7103
		3912	1025	2215	6317	13469

Other Work

Infant Deaths	5	-	6	77	88
Infectious Disease or Contact	2	-	1	2	5
Reports on Insanitary Conditions	5	-	3	3	11
No. of Visits to Nursery Schools and Homes for Protected Infants	2	-	10	-	12
	14	-	20	82	116

Total Visits

First Visit - Infants	7190
Re-Visits - "	5134
Other Children	13469
Other Visits	104
	25897

	E	C	B	A	Total
Health Visitor Students attending Clinics	12	-	-	-	
Female entrants to service were medically examined	202	-	-	-	
Cases referred to					
Hospitals	-	14	530	1216	
Societies	-	-	23	19	
Private Doctor	-	-	11	14	
Day Nurseries	-	-	-	-	

ATTENDANCES AT GALE STREET, BROOK STREET AND MOBILE CLINICS JANUARY – DECEMBER 1961

EUROPEAN CLINICS

NON-EUROPEAN CLINICS
Brook Street & Gale Street Centre's and Mobile Clinics

	Gale Street	Mobile Clinics	Total	Coloureds	Bantu	Asiatics	Total	Jan-Dec 1961	Jan-Dec 1960
Total number of sessions	200	666	866	09 179	1536	530	2245	3111	2828
Total sessions for children	188	1666	854	167	1492	99	2090	2944	2660
Total Ante-Natal Sessions	12	-	12	12	44	999	155	167	168
Total Attendance at Clinics	10030	38314	48344	17288	146498	83769	247555	295899	283233
New Cases out of above number	998	2701	3699	1537	21677	11312	34526	38225	34991
Total attendance of infants	6080	18126	24206	6003	53,452	31294	90749	114955	111646
Total attendance of toddlers and pre-school children	1638	12307	13945	6761	46861	25203	78825	92770	86887
Total attendance of Nursing mothers	2237	7881	10118	4505	45868	23693	74066	84184	80109
Total attendance of expectant mothers	75	-	75	19	317	3579	3915	3990	4828
Number of test feeds given	16	41	57	1	1	12	14	71	125
Number of mother instructed in treatment of minor ailments	361	1541	1902	1257	44635	12718	58610	60512	67175
Number of health talks and demonstrations given	904	2213	3117	851	14943	5375	21169	24286	25558
Number of cases seen by doctor	-	-	-	-	-	-	-	5006	9809

XVIII STAFF

Except in regard to two categories of personnel i.e. Health Inspectors and Health Visitors, little difficulty was experienced in maintaining the staff establishment at the authorised strength.

Although some improvement in the number of applications for Health Inspectors' posts was apparent these, in general, provided little scope for selection.

A further attempt to fill a vacant position of Coloured Health Visitor, created some years ago, was unsuccessful.

The need for Indian Health Visitors has long been felt but, due to the absence of such personnel, the Department has perforce had to employ European Health Visitors, assisted by unqualified Indian Clinic Assistants, to carry on the child health clinic and home visiting service for the Indian community. However, Indian nurses are now becoming available and posts for two Indian Health Visitors and five Indian nurses were created. One appointment of Indian Health Visitor has been made and it is hoped to fill the other positions early next year.

Applications for positions of Bantu Health Visitor were not readily forthcoming. The shortage of Bantu Health Visitors is no doubt attributable to the fact that the necessary tuition is unobtainable locally and, as far as is known, the only centre where training courses are offered is Kimberley.

It is pleasing to note that, following upon representations made by this Department over a lengthy period, the M.L. Sultan Technical College in Durban has arranged courses for Coloured and Indian Health Visitors, which are due to commence next year. This development should enable Durban and other Natal local authorities to recruit this type of staff without difficulty in the near future.

Additional Staff

At the end of last year, certain proposals to augment the staff, emanating from an economy and efficiency investigation, were under consideration by the City Council and these were ultimately approved in February.

Arising from an investigation of the Bantu Administration Department, undertaken by the Council's Organisation and Methods Officer, it was decided, for reasons of economy and efficiency, that the City Health Department was best fitted and equipped to undertake the control of bed bug infestation in Municipal Bantu institutions. The European and Bantu staff for this work was accordingly authorised.

With the closing down of the Institute of Family and Community Health by the Natal Provincial Administration, child health and immunisation services, which had been conducted by the Institute for a number of years at the Lamont Bantu Township and portion of the Merebank area, reverted to this Department. This also entailed an increase of staff which received the approval of the City Council in October.

Finally, with the decision by the City Council to embark upon a vast Indian housing project at Chatsworth, staff to provide initial health services was authorised towards the close of the year.

It is recorded that the approval of the Secretary for Health was given for purposes of the Public Health Act in respect of all posts where this was required.

As has been mentioned in previous reports, it is the City Council's policy to employ suitably qualified non-European personnel, wherever practicable, for the purpose of providing health services to the several non-European groups. That policy has been adhered to in the recent staff additions.

The establishment of the Department was augmented by the following additional posts during the year.

European	25
Coloured	1
Bantu	24
Asiatic	26
Total	76

Staff Establishment

Section and Position	No.	Incumbent/Remarks
Executive:		
City Medical Officer of Health	1	Dr. A. Stephen, M.B.E., B.Sc., M.B., Ch.B., D.P.H.
Deputy City Medical Officer of Health	1	Dr. C.R. Mackenzie, M.B., B.Ch., D.P.H., D.T.M. & H.
Assistant Medical Officer of Health	1	Dr. G.L. Hilton-Barber, M.B., Ch.B., D.P.H.
Administration:		
(a) European		
Principal Assistant (Admin.)	1	Thomson, A.H. (M.R.S.H.)
Senior Assistant (Financial)	1	Donkin, F.D.
Senior Assistant (Technical)	1	Poplett, D.J. (M.R.S.H.)
Chief Clerk	1	Kibble, G.A. (Cert. R.S.H.)
Senior Clerk (Grade 11)	1	
Senior Clerk (Grade 111)	2	
Clerk (Grade 1)	3	
Clerk (Grade 11)	4	
Clerk (Grade 111)	6	
Principal Lady Assistant	2	
Senior Lady Assistant	2	
Lady Assistant	9	2 posted to Immunisation Service
Senior Typist	2	
Typist	5	
General Assistant (Unestablished)	1	
(b) Bantu		
Health Assistant (Grade 11)	2	Posted to Tuberculosis Section
Watchman	2	
Labourer	2	
(c) Indian		
Clerk (Grade 111)	1	
General Assistant	1	
Assistant	7	
Epidemiology (embracing tuberculosis, infectious diseases and venereal diseases control)		
(a) European		
Senior Clinical Medical Officer	1	Dr. N.L. Becker, M.B., Ch.B., D.P.H., (from 1st June, 1961)
Operator - X-ray (Male)	1	

Section and Position	No.	Incumbent/Remarks
General Assistant	2	1 Posted full time to Immunisation service. 1 employed on disinfection, Milk-handler control and sundry duties
Note: The following staff is posted from the Health Visiting and Health Inspection Sections for full-time duty in this section:		
T.B. Control		
5 Health Visitors 1 Clinic Sister 1 Health Inspector		
I.D. and V.D. Control		
1 Senior Health Inspector 1 Health Visitor		
(b) Bantu		
Health Assistant (Grade 1)	15	
Health Assistant (Female)	2	
Interpreter/Cleaner	1	
Note: 2 Health Assistants (Grade 11) posted from Administration Section for full-time clerical and other duties at Tuberculosis Clinics.		
(c) Indian		
Health Assistant (Grade 1)	6	
Health Inspection:		
(a) European		
Chief Health Inspector	1	Johnston, M.M., Public Health Inspector's Certificate of the Royal Society of Health
Deputy Chief Health Inspector	1	Clayton, A., Public Health Inspector's Certificate of the Royal Society of Health.
Senior Health Inspector	10	Ashdown, N.D., Public Health Inspector's and Meat and Other Foods Certificates of the Royal Society of Health
Note: Positions allocated to:		
District and Food Hygiene (6) Housing and Plans (1) Epidemiology (1) Dairies (1) Field Hygiene (1)		Bannon, J.D.) Public Health Clark, A.G.) Inspector's Crickmore, C.R.A.) Certificate Harris, J.K.) of the Hornby, A.V.) Royal Society Ingram, W.A.) of Smith, A.M.) Health Thomas, L.E., Public Health Inspector's Meat and Other Foods and Tropical Hygiene Certificates of the Royal Society of Health. Young, B.J., Public Health Inspector's and Tropical Hygiene Certificates of Royal Society of Health.
Health Inspector	39	Alder, C.H.; Atkinson, C.E.; Benians, P.E.;

Section and Position	No.	Incumbent/Remarks
Allocated as follows: District and Food) 34 Hygiene) Dairies 3 Plans 1 Epidemiology (T.B.) 1 39		Booyens, M.M; Brider, D.A. (resigned 31st August 1961); Brokenshaw, A.D.; Burgess, D.W.; Butler, M.W. Butler, J.E. (from 1st March 1961) de Villiers, P.D.; de Beer, H.H.; Green, C.E.O.; Griffin, R.E.; *Hazle, A.D.; Herbst, W.J. (resigned 31st August 1961); Hogan, J.P.; Hull, V.H.; Jakins, T.I.N. (from 1st August 1961); Keen, F. (from 1st May 1961); Knowles, D.H.; Khaled, R.A.C. (transferred to City Engineer's Department 4th January 1961); Marsh, H.N.; McIver, E.I.; Moore, J.H. Ogden, G.B. (from 1st March 1961); Pearman, E.F.J.; Phillips, L.G.F.; *Roberts, K.W.C.; Roberts, A.J.L.; Schou, M.S.; Spence, D.B.; *Spencer, D.W.; Sutherland, F.T.; van Straaten, J.S. (from 1st March 1961); Vorster, J.H. Walsh, W.W.; Wessels, F.W.J. (transferred to Abattoir Department 31st August 1961); Woolley, G.W.R.; Worthington, C. All Health Inspectors hold the Public Health Inspector's Certificate of the Royal Society for the Promotion of Health and, in addition, certain personnel also hold the Meat and Other Foods and the Tropical Hygiene qualifications. * Also on panel of Health Inspectors for emergency duties at the Municipal Abattoir Vacancies: 4
Health Assistant	12	Trainee Health Inspectors.
Senior General Assistant	1	
General Assistant	7	Engaged full-time on rodent control.
(b) Bantu		
Health Assistant (Grade 11)	2	
(c) Indian		
Health Assistant (Grade 1)	1	
Assistant	5	Rodent control
Veterinary Hygiene:		
European		
Veterinary Medical Officer	1	Dr. A.J. Louw, B.V.Sc.
Laboratory Assistant	1	
Lady Assistant	1	

Field Hygiene

Note: The Senior Health Inspector posted to Field Hygiene is responsible for this Section, in addition to rodent and other pest control activities.

(a) European

Supervisor	1	Nourse, A.D.
Senior General Assistant	1	
General Assistant		

(b) Bantu

Health Assistant (Grade 1)	1	
Spotter (Mosquito)	11	
Labourer	90	

(c) Indian

Spotter (Mosquito)	2	
Labourer	8	

Health Visiting:

(a) European

Chief Health Visitor	1	**Eckhoff, Miss E.J., Medical and Surgical, Midwifery, Mothercraft and R.S.H. Health Visitor's and School Nurse's Certificates.**
Senior Health Visitor	1	Rankin, Miss M.H.E., Medical and Surgical, Midwifery, Mothercraft and R.S.H. Health Visitor's and School Nurse's Certificates
Health Visitor	29	Anderson, Miss E.M.; Baines, Mrs. K.M.; Barker, Mrs. M.I.; Brown, Miss M.K.; Burdon, Miss C.W.; Dolkens, Mrs. S.; Essery, Miss M.; Hamlyn, Miss E.F.; Harding, Miss E.; Hewitt, Miss L.M.; Hook, Mrs. E.M.; Laue, Mrs. H. (From 1st April, 1961); Longmore, Mrs. F.B. Meyerstein, Mrs. S.M.; Mitchell, Miss B.I.; Muller, Miss M.; Norman, Miss F.M.; Poulton, Mrs. M.P.; Schwarz, Mrs. C.; Stead, Mrs., R.J.; Sutherland, Mrs. J.W.; Taylor, Mrs. J.S.; van Dyk, Mrs. I.N. (from 1st October 1961); Watts, Mrs. D.J.; Webb, Mrs. M.E.; Whiting, Miss A.; Wilde, Miss M.A.; All suitably qualified and registered medical and surgical nurses. Vacancies: 2

Note: Sectional allocation of posts:-

Family Health Service		20
Epidemiology;		
T.B. Control	5	
I.D. and V.D.	1	6
Immunisation		3
		29

Section and Position	No.	Incumbent/Remarks
Clinic Sister	6	Alcock, Mrs. P.B. (temporary with effect from 1st May, 1961);
Note: Sectional allocation of posts: Family Health Service 3 Immunisation 2 T.B. Clinic 1 6		Hardman, Mrs. K.J.; Hunter, Miss J.W. Laue, Mrs. H. (transferred to Health Visitor 1st April, 1961); Pettigrew, Mrs. E.; Robinson, Mrs. J.O. (temporary with effect from 2nd October, 1961); Thomas, Mrs. D. (resigned 30th April, 1961); van Dyk, Mrs. I.N. (from 1st May, 1961 transferred to Health Visitor 1st October, 1961); Weston, Mrs. M.A. (Temporary with effect from 1st June, 1961). All suitably qualified and registered medical and surgical nurses.
Clinic Assistant	13	2 vacancies.
(b) Coloured		
Health Visitor	1	Vacant
(c) Bantu		
Health Visitor	19	6 Vacancies
Health Assistant (Female)	8	
Health Assistant (Grade 11)	1	
Interpreter/Cleaner	5	
Labourer	1	
(d) Indian		
Health Visitor	2	1 Vacancy
Nurse	5	All vacant
Health Assistant (Female)	12	
Interpreter/Cleaner	4	
General Assistant	1	
Labourer	1	
Immunisation:		
Note: European Staff comprising 3 Health Visitors, 2 Clinic Sisters, 2 Lady Assistants and 1 General Assistant, is posted from the Health Visiting, Epidemiology and Administration Sections on a full-time basis.		

Section and Position	No.	Incumbent/Remarks
(a) Bantu		
Nurse	2	
Health Assistant (Grade 11)	5	
(b) Indian		
Health Assistant (Gradel)	1	
Health Assistant (Grade 11)	2	
Family Health (Child Hygiene) Service		
European		
Clinical Medical Officer	1	Dr. H.A.B. Pletts, M.B.; B.Ch.
Part-time Medical Specialist	1	Dr. L. Raftery, M.R.C.O.G.; M.R.C.S.; L.R.C.P.
Part-time Clinical Medical Officer	4	Dr. M. Wagener, B.A., M.B., B.Ch. Dr. ME.K. McDonald, M.B.; Ch.B. (from 4th December, 1961). Dr. G.M. Gregersen M.B. Ch.B.; (from 18th December, 1961). 1 Vacancy.
Health Education :		
(a) European		
Health Educator	1	Goddard, Miss E.
Technician	1	Godfrey, D.M.
General Assistant (w2nd Grade)	2	
(b) Coloured		
Lecturer	1	
(b) Bantu:		
Lecturer	2	
Assistant Lecturer	1	
Junior Lecturer	4	
(d) Indian		
Lecturer	1	
Jun ior Lecturer	3	
Non-European Health and Medical Services: V.D. Clinic Staff:		
(a) European		
Senior Clinical Medical Officer (City Venereologist)	1	Wailer, Dr. A.A. M.R.C.S.; L.R.C.P.
Clinical Medical Officer (Female)	1	Dr. M. McAuliffe, L.A.H., L.R.C.P.S.D.
(b) Bantu		
Medical Officer	1	Dr. C.N. Dhlamini, L.R.C.P., L.R.C.S. L.R.F.P.S.
Nurse	4	All suitably qualified and registered an medical and surgical nurses.

Section and Position	No.	Incumbent/Remarks
Health Assistant (Grade 1)	2	
Health Assistant (Grade 11)		
Interpreter/Cleaner	1	
Medical Bureau:		
European		
Senior Clinical Medical Officer	1	Dr. M. Casson, M.R.C.S., L.R.C.P.

Total Staff Establishment

European	195
Non-European	255
Total	450

REPORT !B! HOUSING

1. EUROPEAN HOUSING:

During the course of the year there has been a decrease in privately promoted housing development including blocks of flats. It appears that housing for the middle and higher income groups has caught up with demand. There is still an insufficiency of low priced housing however for Europeans.

Generally speaking rentals tend to remain on the high side. In so far as rent controlled premises are concerned, increases have been applied for, and granted, on the grounds of Statutory Enactments, such as higher minimum wages and the implementation of the Urban Areas Act, as amended. Other factors which have also influenced these increases have been higher maintenance charges and costs, and Municipal charges. Flats not subject to rent control have enjoyed a slight decrease due to saturation point having been reached, and the natural movement of tenants who fall in the category of flat dwellers.

It can be said then, that with the exception of the low income group, the housing needs of Europeans are fairly well satisfied.

2. COLOURED HOUSING:

The Coloured population of the City is relatively small. Although a fair number are employed in trades and other forms of occupations which are reasonably well paid, private enterprise has played very little part in the Coloured housing field in the past. It is pleasing to report that Municipal housing for the Coloured community has continued to make progress. These facts are supported on the schedule at the end of this report.

3. INDIAN HOUSING:

This remains one of the City's most urgent problems. Of the total Indian population, only a very small percentage can afford to build their own homes or pay economic rentals. The bulk of this section of the community falls within the sub-economic income group. This factor together with the tendency to large families results in gross overcrowding. On various occasions illegal shacks have been erected on private property and in most cases even elementary sanitation is lacking. The City Engineer's Department has assisted in dealing with these illegal structures as far as practicable.

Of necessity, however, a number of Indian shack settlements have developed which are regarded as a temporary measure pending removal or transit from various areas where housing development work is in progress. The tenants of these shacks wherever possible are re-housed in completed Municipal Housing schemes.

The City Council, fully aware of the urgency of the Indian housing problem, has made great strides in dealing with the matter. For example, very good progress has been made at Merebank. However, this housing scheme, when completed, will house only a portion of the total Indian community and there will still be a large number requiring suitable dwellings.

The establishment of the Indian housing scheme at Chatsworth is in full progress. Negotiations were concluded involving the acquisition of many privately owned properties in this area for housing purposes. Considerable development in regard to roads took place. The overall scheme when completed will result in a huge township, to house approximately 120,000 persons. **It is expected that actual construction will commence early in 1962.**

MUNICIPAL HOUSING AS AT DECEMBER 1961.

Tabulated hereunder is a schedule reflecting the progress made in Municipal housing as at the 31st December 1961. It will be noted that Economic and Sub-economic Schemes have been separated. The National Housing Commission has determined the salary ceiling which controls sub-economic schemes. They are listed as follows:-

(a)	Europeans	R60 per month
(b)	Coloured	R40 per month
(c)	Indian	R40 per month
(d)	Bantu	R30 per month

It is felt that these figures are totally unrealistic in relation to present day costs and and needs, and serious thought should be given to the revision of the above standards. Not only should the salary ceiling be raised, but consideration should be extended to include family dependants.

	European		Coloured		Indian	
	Houses	Flats	Houses	Flats	Houses	Flats
A. Economic						
Selling schemes complete	1,672	-	390	-	2,543	-
Selling schemes under construction	-	-	120	-	624	-
Assisted (including resales)	2,278	-	178	-	639	-
Letting	-	674	-	-	-	-
B. Sub-Economic						
Letting (Aged Poor)	50	-	-	-	-	-
National Housing Letting	-	55	49	64	819	-
	4,000	729	737	64	2,325	-

Total Dwelling Units : 7,855

Housing Units Completed During 1961

Europeans	60
Coloured	120
Indians	1,345

C. Housing Applications on Hand.

	European	Coloured	Indian
Economic - Purchase of Dwelling	1,325	562	6,102
Economic - Letting	574	-	-
Sub-Economic - Letting	118	297	1,580

4. ESTIMATED POPULATION IN COMMUNITY GROUPS:

	Total	Percentage of Total Population
European	166,116	27.56%
Coloured	25,640	4.25%
Indian	224,227	37.19%
Bantu	186,863	31.00%
	602,846	100.00%

It will be noted that the Coloured population is lower than in previous years - this is due to a revision brought about by the Census of 1960.

5. BANTU HOUSING:

This phase of the Council's housing activity has shown considerable progress during the year, in accordance with City Council policy on a large scale. Once again the main development was in the kwaMashu housing scheme, where 1,147 4-roomed houses, 1,460 2-roomed houses, 131 wooden huts and 2,944 beds were completed and handed over to the Department of Bantu Administration. In addition amenities provided during the year included 1 school, 3 shops, a wood and coal depot, market stalls, 2 creches, 1 clinic, 1 swimming bath, football fields and all-weather tennis courts.

The estimated total population of kwaMashu as at the 31st December 1961 was 55,000 and the overall housing position was as follows:-

4-roomed houses	:	5,116
2-roomed houses	:	1,839
1-roomed wooden huts	:	2,501
1-roomed block houses	:	85
Serviced sites	·	154
Beds (dormitory/hostels)	:	8,944
Total Dwelling Units	:	18,639

The kwaMashu access road has been improved and work continues on the railway faciliteis to serve the Township.

Development in the better-type houses for Bantu home owners was reflected, 16 being constructed in Lamont Location, 38 at Umlazi Glebe and 2 at kwaMashu, giving a total of 56 housing units.

Other buildings completed during the year under the aegis of Department of Bantu Administration's building programme included the Bantu Child Welfare Home, Lamont, a creche at Umlazi Glebe, 4 shops erected to the traders' designs, a garage, bus shelters and public conveniences, the reconstruction of the shopping block at Chesterville, and the conversion of dining halls at S.J. Smith Location for use as dormitories.

In a further effort to obliterate the Cato Manor shacks, a start has been made on the new Government Bantu housing project to the South of the City at Umlazi. It is understood that the land, which forms part of the Umlazi Bantu Trust, will be made available to Bantu on a freehold basis. A substantial scheme is envisaged of a size comparable with, if not larger than kwaMashu. The City Engineer's Department is now developing the project on behalf of the State.

Cato Manor Emergency Camp

This settlement originally comprised 4,427 developed sites. Breaking this down into family units and population, the following calculation is used. Each shack/site comprises four rooms and a kitchen. This Department has found that a large number of the kitchens are used for living purposes, cooking being done in the open or in the living rooms, Working therefore on the basis of each shack housing four families, and each family comprising 4-5 persons an estimated population of 70,968 persons can be arrived at. It is very pleasing to record that the Department of Bantu Administration has implemented a vigorous programme of demolition. All the families who occupied the demolished shacks have been rehoused in Municipal housing schemes or other suitable accommodation. On the 31st December 1961 the number of shacks remaining at Cato Manor Emergency Camp had been reduced to 2,575, the estimated reduction in population of 34,618 leaving a balance of approximately 46,350 persons still to be removed and re-housed.

The shack areas totally eliminated during the year are listed hereunder :-

- Cabazini
- Dlamini
- Ezimbuzini
- Fair Breeze
- Jeep Coat
- Mgenge
- Manasa
- Mokoena
- Mathonsi
- Mdhlovu
- Nsimbini
- Orlando

Shack demolitions in the Emergency Camp will continue during the coming year but the rate of progress will be dependent on the number of dwelling units available to re-house the shack occupants.

The following locations - Hostels/Dormitories have been closed down and the occupants re-accommodated at kwaMashu :-

Baumannville	Original capacity	120 houses -	Population	800
Bell Street (Male)	"	1,165 beds	"	1,165
Ordnance Road (Male)	"	440 beds	"	440
Somtseu Road (Male)	"	7,040 beds	"	7,040

Summary of Bantu Housing:

	Locations/Townships Name	No. of Houses	Population (Estimated)
1.	Chesterville	1,265	8,000
2.	Lamont (Sub-economic)	1,911	12,200
3.	Lamont Extension (Economic)	826	5,200
4.	Umlazi Glebe	735	4,700
5.	kwaMashu	9,695	46,000
	Total	14,432	76,100

	Hostels/Dormitories Name	Beds
1.	Dalton Road (male)	1,662
2.	Grey Street (Female)	687
3.	Jacobs (Female)	64
4.	Jacobs (Male)	788
5.	kwaMashu (Male)	8,944
6.	S.J. Smith (Male)	4,602
	Total	16,747

Total Number of Bantu Housed by Municipal Undertaking: 92,847

Control of Premises (Slums) In Zoned Areas

Steps have been taken to improve premises as and where necessary, and results to date have been satisfactory. This aspect of housing has exercised the mind of the Department for some time and a more vigorous approach to the problem will be put into effect during the coming year.

Building Plans

During the course of the year a total of 2,509 plans were submitted and scrutinized by the Department. It will be noted that this figure represents a decrease of 1,402 plans in comparison with 1960.

Type of Structure		No. of Plans	No. of Units	Estimated Cost
New Private Dwellings -	102 Rooms		1	
	3 "		13	
	4 "		55	
	5 "		325	
	6 " and over		80	
Total of Dwellings		454	474	R 2,479,583
Flats	1 Room		65	
	2 Rooms		161	
	3 "		273	
	4 "		99	
Total		24	598	R 2,677,300
Other Residential Building		1		160,000
Industrial - Commercial		53		3,168,820
Other New Buildings		14		650,250
New Municipal/Government Buildings		9		861,630
Additions to Residential Buildings		1,342		750,454
" Non-Residential Buildings		596		1,261,454
" Municipal Buildings		16		295,440
Total		2,031		R 7,148,048
GRAND TOTAL:		2,509	1,072	R12,304,931

SUMMARY OF ESSENTIAL INFORMATION RELATING TO LOCATIONS ETC.

Location or Township	Year completed	Houses		Water Supply	Sanitation	Ablution	Remarks
		Economic	Sub-economic				
Chesterville	1946	-	1,265	Individual piped	Water borne	Showers to each house	Mother and baby clinic twice a week - City Health Department.
Lamont	Still being developed	-	1,911	Piped supply	Water borne	Showers to each house Plus 178 communal washing gullies	As from February 1961 a clinic service operated by the Durban City Health Department
Lamont Extension	Still being developed	826	-	Piped supply	Water borne	Showers to each house	- ditto -
Umlazi Glebe	Stillebeing developed	-	735	45 Standpipes	3 Aqua-privies 732 Pit privies		Same as Chesterville
kwaMashu	Still being developed			Piped supply	Water borne	Shower cubicles to each house	Daily Health Clinic by City Health Department.

Chesterville Location is provided throughout with electrical power as are all house and dormitories. Electrical power is available in all other locations and a township, but only a few residents have taken advantage of this amenity.

CAUSES OF DEATH

(Figures for 1960 in parenthesis)

(Classified according to International Intermediate List of 150 Causes from Sixth Revision, World Health Organisation, 1948)

Ref.	Causes of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Totals		
			M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
A 1	Tuberculosis of Respiratory System	001–008	14	–	14 (13)	10	3	13 (11)	74	55	129 (193)	25	17	42 (21)	123	75	198 (238)
2	Tuberculosis of Meninges and Central Nervous System	010	–	–	– (1)	–	–	– (1)	5	4	9 (17)	4	3	7 (9)	9	7	16 (28)
3	Tuberculosis of Intestine, Peritoneum and Mesenteric Glands	011	–	–	– (–)	–	–	– (–)	2	3	5 (11)	–	–	– (3)	2	3	5 (14)
4	Tuberculosis of Bones and Joints	012, 013	–	1	1 (–)	–	–	– (–)	1	–	1 (3)	1	–	1 (2)	2	1	3 (5)
5	Tuberculosis, All other forms	014–019	–	–	– (–)	–	2	2 (–)	8	9	17 (10)	1	5	6 (3)	9	16	25 (13)
6	Congenital Syphilis	020	–	–	– (–)	–	–	– (–)	1	–	1 (2)	–	–	– (–)	1	–	1 (2)
10	All other Syphilis	022,023,026–029	6	1	7 (10)	1	1	2 (2)	7	2	9 (16)	–	–	– (2)	14	4	18 (30)
12	Typhoid Fever	040	–	–	– (1)	–	–	– (–)	–	2	2 (3)	–	–	– (–)	–	2	2 (4)
13	Paratyphoid Fever and Other Salmonella Infections	041, 042	–	–	– (–)	–	–	– (–)	–	–	– (–)	–	1	1 (–)	–	1	1 (–)
16	Dysentery, All Forms	045–048	–	–	– (–)	–	1	1 (5)	19	20	39 (50)	4	1	5 (6)	23	22	45 (61)
20	Septicaemia and Pyaemia	053	2	3	5 (5)	–	–	– (–)	1	5	6 (6)	5	1	6 (–)	8	9	17 (11)
21	Diphtheria	055	–	–	– (1)	–	–	– (–)	5	6	11 (6)	1	2	3 (4)	6	8	14 (11)
22	Whooping Cough	056	–	–	– (–)	–	–	– (–)	–	1	1 (3)	–	–	– (–)	–	1	1 (3)
23	Meningococcal Infections	057	–	–	– (1)	–	–	– (–)	–	–	– (6)	–	1	1 (–)	–	1	1 (7)
26	Tetanus	061	–	–	– (–)	1	–	1 (1)	14	13	27 (34)	2	2	4 (7)	17	15	32 (42)
28	Acute Poliomyelitis	080	–	–	– (1)	–	–	– (–)	1	1	2 (2)	–	–	– (1)	1	1	2 (4)
29	Acute Infectious Encephalitis	082	1	–	1 (–)	1	—	1 (–)	–	–	– (–)	–	–	– (2)	2	–	2 (2)
32	Measles	085	–	1	1 (1)	1	–	1 (2)	11	8	19 (34)	–	1	1 (1)	12	10	22 (38)
34	Infectious Hepatitis	092	–	–	– (–)	–	–	– (–)	–	2	2 (–)	2	1	3 (2)	2	3	5 (2)
41	Ankylostomiasis	129	–	–	– (–)	–	–	– (–)	–	–	– (1)	–	–	– (–)	–	–	– (1)
42	Other Diseases due to Helminths	124,126,128,130	–	–	– (–)	–	–	– (–)	1	–	1 (–)	–	2	2 (–)	1	2	3 (–)
43	All Other Diseases Classified as Infective or Parasitic	036–039,049,054,059, 063–074,086–090,093, 095,096,120-122,131-138	–	–	– (–)	–	–	– (–)	–	–	– (3)	–	–	– (1)	–	–	– (4)
44	Malignant Neoplasm of Buccal Cavity and Pharynx	140–148	8	–	8 (4)	–	–	– (1)	2	–	2 (–)	1	1	2 (3)	11	1	12 (8)

Ref.	Cause of Death	Detailed List Numbers	European				Coloured				Bantu				Asiatic				Totals			
			M.	F.	Total		M.	F.	Total		M.	F.	Total		M.	F.	Total		M.	F.	Total	
45	Malignant Neoplasm of Oesophagus	150	7	3	10	(5)	–	1	1	(1)	11	–	11	(14)	1	4	5	(2)	19	8	27	(22)
46	Malignant Neoplasm of Stomach	151	12	10	22	(23)	1	–	1	(3)	3	1	4	(4)	16	6	22	(15)	32	17	49	(45)
47	Malignant Neoplasm of Intenstine, Except Rectum	152, 153	8	10	18	(14)	–	–	–	(–)	1	1	2	(1)	1	–	1	(–)	10	11	21	(15)
48	Malignant Neoplasm of Rectum	154	6	5	11	(12)	–	1	1	(–)	–	–	–	(–)	–	–	–	(–)	6	6	12	(12)
49	Malignant Neoplasm of Larynx	161	2	1	3	(3)	1	–	1	(–)	3	–	3	(–)	–	1	1	(3)	6	2	8	(6)
50	Malignant Neoplasm of Trachea, and of Bronchum and Lung, not specified as secondary	162, 163	33	6	39	(47)	–	–	–	(2)	11	2	13	(12)	4	3	7	(7)	48	11	59	(68)
51	Malignantt Neoplasm of Breast	170	–	28	28	(16)	–	2	2	(1)	2	4	6	(8)	1	1	2	(3)	3	35	38	(28)
52	Malignant Neoplasm of Cervix Uteri	171	–	1	1	(3)	–	–	–	(2)	–	10	10	(17)	–	5	5	(4)	–	16	16	(26)
53	Malignant Neoplasm of Other and Unspecified Parts of Uterus	172–174	–	4	4	(2)	–	3	3	(–)	–	–	–	(1)	–	5	5	(2)	–	12	12	(5)
54	Malignant Neoplasm of Prostate	177	12	–	12	(6)	1	–	1	(–)	–	–	–	(2)	–	–	–	(–)	13	–	13	(8)
55	Malignant Neoplasm of Skin	190, 191	1	1	2	(5)	–	–	–	(–)	–	1	1	(1)	–	–	–	(–)	1	2	3	(6)
56	Malignant Neoplasm of Bone and Connective Tissue	196, 197	3	2	5	(4)	–	–	–	(–)	2	–	2	(2)	–	–	–	(1)	5	2	7	(7)
57	Malignant Neoplasm of all Other and Unspecified Sites	155-160, 164, 165, 175, 176 178-181, 192-195, 198, 199	33	34	67	(69)	3	4	7	(7)	17	10	27	(33)	15	6	21	(15)	68	54	122	(124)
58	Leukaemia and Aleukaemia	204	3	7	10	(5)	–	1	1	(–)	–	1	1	(1)	5	2	7	(2)	8	11	19	(8)
59	Lymphosarcoma and Other Neoplasms of Lymphatic and Haematopoitic System	200–203, 205	2	13	15	(6)	–	1	1	(–)	–	2	2	(3)	2	2	4	(2)	4	18	22	(11)
60	Benign Neoplasms and Neoplasms of Unspecified Nature	210–239	2	3	5	(4)	1	–	1	(–)	1	1	2	(1)	1	–	1	(2)	5	4	9	(7)
63	Diabetes Mellitis	260	5	5	10	(8)	–	–	–	(2)	1	3	4	(10)	6	12	18	(19)	12	20	32	(39)
64	Avitaminosis and Other Deficiency States	280–286	–	1	1	(1)	1	1	2	(1)	42	58	100	(130)	7	4	11	(4)	50	64	114	(136)
65	Anaemias	290–293	1	1	2	(2)	–	–	–	(–)	1	1	2	(6)	–	2	2	(1)	2	4	6	(9)
66	Allergic Disorders: All Other Endocrine, Metabolic and Blood Diseases	240–245, 253, 254, 270–277, 287–289, 294–299	2	5	7	(5)	–	1	1	(3)	5	4	9	(8)	7	4	11	(10)	14	14	28	(26)
67	Psychoses	300–309	2	–	2	(–)	–	–	–	(–)	–	–	–	(–)	–	1	1	(–)	2	1	3	(–)
68	Psychoneuroses and Disorders of Personality	310–324, 326	–	–	–	(1)	–	1	1	(1)	–	–	–	(–)	–	–	–	(–)	–	1	1	(2)

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatics			Totals		
			M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
69	Mental Deficiency	325	–	–	– (–)	–	–	– (–)	–	–	– (–)	–	–	– (1)	–	–	– (2)
70	Vascular Lesions Affecting Central Nervous System	330–334	83	87	170 (152)	7	10	17 (13)	29	37	66 (73)	77	91	168 (133)	196	225	421 (371)
71	Nonmeningoccocal Meningitis	340	2	1	3 (2)	1	1	2 (2)	12	11	23 (17)	5	4	9 (9)	20	17	37 (30)
72	Multiple Sclerosis	345	–	–	– (1)	–	–	– (–)	–	–	– (–)	–	–	– (–)	–	–	– (1)
73	Epilepsy	353	1	–	1 (2)	–	–	– (–)	–	1	1 (5)	1	2	3 (2)	2	3	5 (9)
77	Otitis Media and Mastoiditis	391–393	–	–	– (–)	–	–	– (–)	1	1	2 (2)	–	–	– (1)	1	1	2 (3)
78	All Other Diseases of the Nervous System and Sense Organs	341-344, 350-352, 354-369, 380-384, 386, 388-390, 394-398	5	6	11 (4)	1	1	2 (3)	8	3	11 (4)	5	2	7 (12)	19	12	31 (23)
79	Rheumatic Fever	400–402	–	–	– (–)	–	–	– (–)	1	2	3 (7)	3	2	5 (3)	4	4	8 (10)
80	Chronic Rheumatic Heart Disease	410–416	7	3	10 (4)	2	2	4 (1)	2	2	4 (4)	3	1	4 (6)	14	8	22 (15)
81	Arteriosclerotic and Degenerative Heart Disease	420–422	255	116	371 (349)	8	9	17 (16)	26	13	39 (54)	106	43	149 (151)	395	181	576 (570)
82	Other Diseases of Heart	430–434	63	41	104 (147)	8	3	11 (9)	31	27	58 (134)	41	29	70 (185)	143	100	243 (475)
83	Hypertension with Heart Disease	440–443	11	15	26 (11)	1	4	5 (3)	12	11	23 (6)	41	39	80 (15)	65	69	134 (35)
84	Hypertension without Mention of Heart	444–447	3	6	9 (2)	–	1	1 (1)	3	3	6 (3)	5	6	11 (7)	11	16	27 (13)
85	Disease of Arteries	450–456	29	15	44 (51)	1	2	3 (3)	1	6	7 (18)	3	2	5 (11)	34	25	59 (83)
86	Other Diseases of Circulatory System	460–468	12	16	28 (22)	3	1	4 (2)	2	6	8 (9)	5	2	7 (4)	22	25	47 (39)
87	Acute Upper Respiratory Infections	470–475	–	1	1 (1)	–	–	– (–)	–	–	– (3)	–	1	1 (1)	–	2	2 (5)
88	Influenza	480–483	–	–	– (–)	–	–	– (–)	1	–	1 (–)	–	–	– (1)	1	–	1 (1)
89	Lobar Pneumonia	490	7	14	21 (19)	2	1	3 (4)	12	10	22 (57)	11	12	23 (14)	32	37	69 (94)
90	Broncho Pneumonia	491	39	33	72 (109)	10	10	20 (21)	152	155	307 (527)	167	156	323 (305)	368	354	722 (962)
91	Primary Atypical, Other and Unspecified Pneumonia	492, 493	5	2	7 (13)	1	–	1 (–)	19	5	24 (26)	3	2	5 (19)	28	9	37 (58)
92	Acute Bronchitis	500	2	–	2 (–)	–	–	– (–)	1	–	1 (6)	13	8	21 (17)	16	8	24 (23)
93	Bronchitis, Chronic and Unqualified	501, 502	2	1	3 (2)	–	–	– (1)	3	–	3 (5)	9	5	14 (6)	14	6	20 (14)
95	Empyema and Abscess of Lung	518, 521	–	–	– (4)	1	–	1 (2)	5	1	6 (12)	1	2	3 (2)	7	3	10 (20)
97	All Other Respiratory Diseases	511–517, 520, 522–527	14	12	26 (25)	4	1	5 (3)	8	–	8 (12)	8	–	8 (15)	34	13	47 (55)
99	Ulcer of Stock Stomach	540	3	3	6 (4)	–	–	– (1)	–	2	2 (3)	2	1	3 (3)	5	6	11 (11)
100	Ulcer of Duodenum	541	2	–	2 (5)	–	–	– (–)	–	–	– (–)	–	–	– (1)	2	–	2 (6)

Ref.	Cause of Death	Detailed List Numbers	European				Coloured				Bantu				Asiatic				Totals			
			M.	F.	Total		M.	F.	Total		M.	F.	Total		M.	F.	Total		M.	F.	Total	
102	Appendicitis	550–553	2	-	2	(1)	-	-	-	(-)	1	-	1	(2)	1	1	2	(-)	4	1	5	(3)
103	Intestinal Obstruction and Hernia	560, 561, 570	6	7	13	(12)	1	-	1	(1)	3	1	4	(6)	1	1	2	(6)	11	9	20	(25)
104	Gastro-Enteritis and Colitis, Except Diarrhoea of the Newborn	571, 572	3	-	3	(5)	7	11	18	(16)	139	113	252	(532)	56	40	96	(112)	205	164	369	(665)
105	Cirrhosis of Liver	581	8	5	13	(15)	-	1	1	(2)	17	7	24	(25)	5	1	6	(9)	30	14	44	(51)
106	Cholelithiasis and Cholecystitis	584, 585	-	2	2	(1)	-	-	-	(-)	-	1	1	(-)	-	-	-	(-)	-	3	3	(1)
107	Other Diseases of Digestive System	536-539, 542-544, 545, 573-580, 582, 583, 586, 587	10	7	17	(21)	3	2	5	(1)	17	13	30	(48)	10	4	14	(23)	40	26	66	(93)
108	Acute Nephritis	590	-	-	-	(-)	-	-	-	(1)	-	-	-	(2)	4	-	4	(4)	4	-	4	(7)
109	Chronic Other and Unspecified Nephritis	591-594	4	12	16	(15)	-	-	-	(3)	8	8	16	(12)	7	5	12	(13)	19	25	44	(43)
110	Infections of Kidney	600	2	5	7	(10)	1	1	2	(-)	8	2	10	(14)	2	1	3	(3)	13	9	22	(27)
111	Calculi of Urinary System	602, 604	-	-	-	(2)	-	-	-	(-)	-	-	-	(-)	-	-	-	(-)	-	-	-	(2)
112	Hyperplasia of Prostate	610	4	-	4	(-)	1	-	1	(1)	-	-	-	(-)	-	-	-	(1)	5	-	5	(2)
114	Other Diseases of Genito-Urinary System	601, 603, 605-609, 611-617, 622-637	1	-	1	(1)	-	-	-	(-)	-	3	3	(8)	-	3	3	(1)	1	6	7	(10)
115	Sepsis of Pregnancy, Childbirth and the Puerperium	640, 641, 681, 682, 684	-	-	--	(-)	-	-	-	(-)	-	-	-	(2)	-	1	1	(-)	-	1	1	(2)
116	Toxaemias of Pregnancy and the Puerperium	642, 652, 685, 686	-	1	1	(-)	-	-	-	(-)	-	7	7	(2)	-	6	6	(4)	-	14	14	(6)
117	Haemorrhage of Pregnancy and Childbirth	643, 644, 670-672	-	-	-	(1)	-	-	-	(-)	-	1	1	(2)	-	-	-	(5)	-	1	1	(8)
118	Abortion without mention of Sepsis or Toxaemia	650	-	-	-	(1)	-	-	-	(-)	-	3	3	(1)	-	3	3	(3)	-	6	6	(5)
119	Abortion with Sepsis	651	-	2	2	(-)	-	-	-	(1)	-	3	3	(1)	-	3	3	(1)	-	8	8	(3)
120	Other Complications of Pregnancy, Childbirth and the Puerperium	645-649, 673-680, 683, 687-689	-	-	-	(-)	-	-	-	(-)	-	-	-	(3)	-	2	2	(1)	-	2	2	(4)
121	Infections of Skin and Subcutaneous Tissue	690-698	-	-	-	(1)	-	-	-	(-)	-	2	2	(-)	-	-	-	(2)	-	2	2	(3)
122	Arthritis and Spondylitis	720-725	1	-	1	(3)	-	-	-	(-)	-	-	-	(-)	-	1	1	(1)	1	1	2	(4)
124	Osteomyelitis and Periostitis	730	-	-	-	(-)	-	-	-	(-)	-	-	-	(-)	1	-	1	(1)	1	-	1	(1)
126	All Other Diseases of Skin and Musculoskeletal System	700-716, 731-736, 738-744	-	-	-	(1)	-	-	-	(-)	-	1	1	(1)	-	-	-	(-)	-	1	1	(2)

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
127	Spina Bifida and Meningocele	751	-	1	1 (-)	-	-	- (-)	1	-	1 (1)	-	1	1 (1)	1	2	3 (2)
128	Congenital Malformations of Circulatory System	754	1	2	3 (5)	-	-	- (2)	8	4	12 (4)	4	2	6 (5)	13	8	21 (16)
129	All Other Congenital Malformations	750,752,753,755-759	1	1	2 (6)	-	1	1 (1)	3	4	7 (16)	8	3	11 (4)	12	9	21 (27)
130	Birth Injuries	760, 761	-	1	1 (-)	-	1	1 (-)	8	12	20 (14)	4	5	9 (7)	12	19	31 (21)
131	Postnatal Asphyxia and Atelectasis	762	7	7	14 (8)	2	1	3 (6)	15	8	23 (40)	10	5	15 (14)	34	21	55 (68)
132	Infections of the Newborn	763-768	-	-	- (15)	-	3	3 (6)	28	22	50 (31)	37	21	58 (19)	65	46	111 (71)
133	Haemolytic Disease of the Newborn	770	1	-	1 (-)	-	-	- (-)	5	2	7 (4)	-	1	1 (3)	6	3	9 (7)
134	All Other Defined Diseases of Early Infancy	769, 771, 772	1	1	2 (2)	1	1	2 (4)	20	24	44 (57)	8	6	14 (27)	30	32	62 (90)
135	Ill-defined Diseases Peculiar to Early Infancy and Immaturity Unqualified	773 – 776	15	13	28 (31)	10	11	21 (14)	111	77	188 (204)	69	37	106 (75)	205	138	343 (324)
136	Senility Without Mention of Psychosis	794	14	17	31 (10)	1	1	2 (1)	1	2	3 (4)	6	4	10 (4)	22	24	46 (19)
137	Ill-defined and Unknown Causes of Morbidity and Mortality	780–793, 795	58	69	127 (77)	7	5	12 (16)	134	138	272 (393)	54	38	92 (39)	253	250	503 (525)
AE. 138	Motor Vehicle Accidents	E810-E835	28	13	41 (29)	7	2	9 (6)	72	20	92 (73)	19	7	26 (36)	126	42	168 (144)
139	Other Transport Accidents	E800-E802, E840-E866	6	2	8 (1)	3	-	3 (1)	8	2	10 (3)	2	-	2 (1)	19	4	23 (6)
140	Accidental Poisoning	E870-E895	-	-	- (2)	2	1	3 (-)	2	-	2 (4)	4	-	4 (1)	8	1	9 (7)
141	Accidental Falls	E900-E904	11	2	13 (3)	1	1	2 (-)	10	3	13 (6)	3	1	4 (2)	25	7	32 (11)
142	Accident Caused by Machinery	E912	-	-	- (1)	-	-	- (-)	-	-	- (-)	-	-	- (-)	-	-	- (1)
143	Accident Caused by Fire and Explosion of Combustible Material	E916	1	2	3 (-)	4	-	4 (2)	4	8	12 (14)	-	14	14 (7)	9	24	33 (23)
144	Accident Caused by Hot Substance Corrosive Liquid, Steam and Radiation	E917, E918	-	-	- (-)	-	-	- (-)	3	3	6 (6)	-	-	- (4)	3	3	6 (10)
146	Accidental Drowning and Submersion	E929	4	-	4 (2)	5	-	5 (4)	3	2	5 (9)	10	-	10 (5)	22	2	24 (20)
147	All Other Accidental Causes	E910, E911, E913–E915 E920-E928, E930-E965	7	4	11 (13)	1	-	1 (2)	36	2	38 (27)	9	3	12 (9)	53	9	62 (49)
148	Suicide and Self-Inflicted Injury	E970-E979	19	9	28 (21)	3	-	3 (-)	6	5	11 (20)	15	3	18 (12)	43	17	60 (53)
149	Homicide and Injury Purposely Inflicted by Other Persons (Not in War)	E980-E985	5	2	7 (6)	3	–	3 (3)	75	13	88 (75)	8	2	10 (9)	91	17	108 (93)
		TOTAL:	930	705	1635 (1530)	135	112	247 (226)	1327	1042	2369 (3307)	978	731	1709 (1557)	3370	2590	5960 (6620)
		CRUDE DEATH RATES	9.85 (9.39)			9.67 (9.11)			12.68 (18.20)			7.62 (7.39)			9.89 (11.41)		

CAUSES OF DEATH IN RESPECT OF INFANTS (UNDER 1 YEAR)

APPENDIX 'B'

(Figures for 1960 in parenthesis)

(Classified according to Internation Intermediate List of 150 Causes from Sixth Revision, World Health Organisation, 1948)

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
A 1	Tuberculosis of Respiratory System	001–008	–	–	– (–)	–	–	– (–)	5	1	6 (9)	–	–	– (1)	5	1	6 (10)
2	Tuberculosis of Meninges and Central Nervous System	010	–	–	– (–)	–	–	– (–)	–	1	1 (1)	–	2	2 (1)	–	3	3 (2)
3	Tuberculosis of Intestines, Peritoneum and Mesenteric Glands	011	–	–	– (–)	–	–	– (–)	–	–	– (1)	–	–	– (–)	–	–	– (1)
5	Tuberculosis, All other forms	014–019	–	–	– (–)	–	1	1 (–)	2	1	3 (10)	–	–	– (1)	2	2	4 (11)
6	Gongenital Syphilis	020	–	–	– (–)	–	–	– (–)	1	–	1 (2)	–	–	– (–)	1	–	1 (2)
12	Typhoid Fever	040	–	–	– (–)	–	–	– (–)	1	–	1 (–)	–	–	– (–)	1	–	1
16	Dysentery, All Forms	045–048	–	–	– (–)	–	–	– (–)	5	3	8 (7)	–	–	– (1)	5	3	8 (8)
20	Septicaemia and Pyaemia	053	–	–	– (–)	–	–	– (–)	1	1	2 (2)	–	–	– (–)	1	1	2 (2)
21	Diphtheria	055	–	–	– (–)	–	–	– (–)	–	1	1 (2)	–	1	1 (–)	–	2	2 (2)
22	Whooping Cough	056	–	–	(–)	–	–	– (–)	–	1	1 (1)	–	–	– –	–	1	1 (1)
23	Meningococcal Infections	057	–	–	– (–)	–	–	– (–)	–	–	– (5)	–	1	1 –	–	1	1 (5)
26	Tetanus	061	–	–	– (–)	–	–	– (–)	13	12	25 (33)	1	–	1 (2)	14	12	26 (35)
32	Measles	085	–	–	– (–)	1	–	1 (1)	2	–	2 (12)	–	–	– –	3	–	3 (13)
43	All Other Diseases Classified as Infective or Parasitic	036-039, 049, 054, 059, 063-074, 086-090, 093, 095, 096, 120-122, 131-138	–	–	– (–)	–	–	– (–)	–	–	– (1)	–	–	– (–)	–	–	– (1)
59	Lymphosarcoma and Other Neoplasms of Lymphatic and Haematopoitic System	200-203, 205	–	1	1 (–)	–	–	– (–)	–	–	– (–)	–	–	– (–)	–	1	1 (–)
64	Avitaminosis and Other Deficiency States	280–286	–	–	– (–)	1	–	1 (–)	12	14	26 (47)	2		2 (4)	15	14	29 (51)
65	Anaemias	290–293	–	1	1 (–)	–	–	(–)	1	1	2 (2)			– (–)	1	2	3 (2)
66	Allergic Disorders: All Other	240-245, 253, 254, 270-277	–	–	– (–)	–	–	– –	–	–	– –	–	–	– –	–	–	– –
	Endocrine, Metabolic and Blood Diseases	287-289, 294-299	–	–	– (–)	–	–	– (–)	–	–	– (2)	–	–	– (–)	–	–	– (2)
70	Vascular Lesions Affecting Central Nervous System	330–334	–	–	– (1)	–	–	– (–)	1	–	1 (–)	–	–	– (–)	1	–	1 (1)
71	Nonmeningococcal Meningitis	340	1	1	2 (–)	–	1	1 (–)	7	8	15 (10)	3	2	5 (2)	11	12	23 (12)
77	Otitis Media and Mastoiditis	391-393	–	–	– (–)	–	–	– (–)	–	–	– (1)	–	–	– (–)	–	–	– (1)

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Total		
			M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
78	All Other Diseases of the Nervous System and Sense Organs	341-344,350-352,354-369,380-384,386,388-390,394-398	–	–	– (–)	–	–	(–)	1	2	3 (3)	–	–	– (3)	1	2	3 (6)
79	Rheumatic Fever	400–402	–	–	– –	–	–	(–)	–	–	– (1)	–	–	– (–)	–	–	– (1)
82	Other Diseases of Heart	430–434	1	–	1 (–)	–	–	–	–	–	– –	1	–	1 –	2	–	2
86	Other Diseases of Circulatory System	460–468	–	–	– (–)	–	–	(–)	–	–	– (1)	–	–	– (–)	–	–	– (1)
87	Acute Upper Respiratory Infections	470–475	–	1	1 (1)	–	–	(–)	–	–	– (1)	–	–	– (1)	–	1	1 (3)
88	Influenza	480–483	–	–	– –	–	–	–	1	–	1 –	–	–	– (1)	1	–	1 (1)
89	Lobar Pneumonia	490							1	3	4 (8)		1	1 (2)	1	4	5 (10)
90	Broncho Pneumonia	491	1	3	4 (4)	4	4	8 (6)	86	87	173 (316)	56	34	90 (97)	147	128	275 (423)
91	Primary Atypical, Other and Unspecified Pneumonia	492,493	–	–	– (–)	–	–	– (–)	9	2	11 (13)	2	1	3 (4)	11	3	14 (17)
92	Acute Bronchitis	500	–	–	– (–)		–	– –	–	–	– (1)	6	5	11 (8)	6	5	11 (9)
93	Bronchitis, Chronic and Unqualified	501,502	–	–	– (1)	–	–	– (1)	3	–	3 (2)	3	2	5 (2)	6	2	8 (6)
95	Empyema and Abscess of Lung	518,521	–	–	– (1)	–	–	– (–)	–	–	– (1)	–	1	1 (1)	–	1	1 (3)
97	All Other Respiratory Diseases	511-517,520,522-527	–	–	– (–)	–	–	– (–)	2	–	2 (2)	1	–	1 (–)	3	–	3 (2)
102	Appendicitis	550–553	–	–	– –	–	–	– –	1	–	1 –	–	–	– –	1	–	1 (–)
103	Intestinal Obstruction and Hernia	560,561,570	1	–	1 (1)	–	–	– (–)	–	–	– (1)	–	–	– (2)	1	–	1 (4)
104	Gastro-Enteritis and Colitis, Except Diarrhoea of the Newborn	571,572	–	–	– (3)	6	7	13 (8)	100	78	178 (382)	42	28	70 (69)	148	113	261 (462)
105	Cirrhosis of Liver	581	–	–	– (–)	–	–	– (–)	–	–	– (1)	–	–	– –	–	–	– (1)
107	Other Diseases of Digestive System	536-539,542-544,545,	–	–	– (–)	–	–	– (–)	–	–	– (–)	–	–	– (–)	–	–	– (–)
		573-580,582,583,586,587	–	–	– (–)	–	–	– (–)	–	–	– (2)	1	–	1 (2)	1	–	1 (4)
110	Infections of Kidney	600	–	–	– (–)	–	–	– (–)	1	–	1 (1)	–	–	– (–)	–	–	1 (1)
114	Other Diseases of Genito-Urinary System	601,603,605-609,611-617,622-637	1	–	1 (–)	–	–	– (–)	–	–	– (–)	–	–	– (–)	1	–	1 (–)
121	Infections of Skin and Subcutaneous Tissue	690–698	–	–	– (–)	–	–	– (–)	–	1	1 (–)	–	–	– (1)	–	1	1 (1)
126	All Other Diseases of Skin and	700-716,731-736,	–	–	– (–)	–	–	– (–)	–	–	– –	–	–	–	–	–	–
	Musculoskeletal System	738-744	–	–	– –	–	–	– –	1	–	1 (1)	–	–	– (–)	1	–	1 (1)
127	Spina Bifida and Meningocele	751	–	1	1 (–)	–	–	– (–)	1	–	1 (1)	–	1	1 (1)	1	2	3 (2)
128	Congenital Malformations of Circulatory System	754	1	1	2 (5)	–	–	– (2)	5	4	9 (3)	3	1	4 (5)	9	6	15 (15)

Ref.	Cause of Death	Detailed List Numbers	European			Coloured			Bantu			Asiatic			Totals		
			M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
A 129	All Other Congenital Malformations	750,752,753,755-759	1		1 (6)		1	1 (1)	3	3	6 (12)	7	3	10 (4)	11	7	18 (23)
130	Birth Injuries	760,761		1	1		1	1	8	12	20 (14)	4	5	9 (7)	12	19	31 (21)
131	Postnatal Asphyxia and Atelectasis	762	7	7	14 (8)	2	1	3 (6)	15	8	23 (39)	10	5	15 (14)	34	21	55 (67)
132	Infections of the Newborn	763–768			(14)		3	3 (6)	28	22	50 (31)	37	21	58 (19)	65	46	111 (70)
133	Haemolytic Disease of the Newborn	770	1		1 (–)			(–)	5	2	7 (4)		1	1 (3)	6	3	9 (7)
134	All Other Defined Diseases of Early Infancy	769,771,772	1	1	2 (2).	1	1	2 (4)	20	24	44 (57)	8	6	14 (27)	30	32	62 (90)
135	Ill-defined Diseases Peculiar to Early Infancy and Immaturity Unqualified	773–776	15	13	28 (31)	10	11	21 (14)	112	76	188 (204)	69	37	106 (75)	206	137	343 (324)
137	Ill-defined and Unknown Causes of Morbidity and Mortality	780-793,795	2		2 (1)	1		1 (1)	60	75	135 (189)	4	4	8 (–)	67	79	146 (191)
AE 141	Accidental Falls	E900-E904			(–)			(–)		2	2 (1)			(–)		2	2 (1)
143	Accident Caused by Fire and Explosion of Combustible Material	E916			(–)			(–)		1	1 (3)			(–)		1	1 (3)
144	Accident Caused by Hot Substance, Corrosive Liquid, Steam and Radiation	E917,E918			(–)			(–)		1	1 (2)			(–)		1	1 (2)
146	Accidental Drowning and Submersion	E929	1		1 (1)			(–)			(–)			(–)	1		1 (1)
149	Homicide and Injury Purposely Inflicted by Other Persons (Not in War)	E980-E985			(–)			(–)		1	1 (–)			(–)		1	1 (–)
			34	31	65 (80)	26	31	57 (50)	514	448	962 (1445)	260	162	422 (360)	834	672	1506 (1932)
		infant mortality rates;	20.34 (15.42)			49.52 (50.51)			167.10 (246.40)			58.99 (59.46)			87.26 (118.37)		

(Deaths of infants under 1 year per 1,000 live births)

Municipal Supplies Department.